AN EVALUATION OF MINIMUM LOT AREA PARCELS IN CLACKAMAS AND YAMHILL COUNTY FARM USE ZONES

by

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A RESEARCH PAPER

submitted to

THE DEPARTMENT OF GEOGRAPHY

in partial fulfillment of the
requirements for the degree of

MASTER OF SCIENCE

June, 1982

Directed by
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AN EVALUATION OF MINIMUM LOT AREA PARCELS IN CLACKAMAS AND YAMHILL COUNTY FARM USE ZONES

ABSTRACT: Retaining agricultural land was a significant concern of Oregon legislatures throughout the 1960s and 1970s. Willamette Valley counties primarily use a minimum lot area standard to retain land for agricultural use. Lot area standards used in portions of Yamhill and Clackamas Counties play a conservative force in each county's land use pattern, but that pattern is becoming increasingly fragmented into individual ownerships.

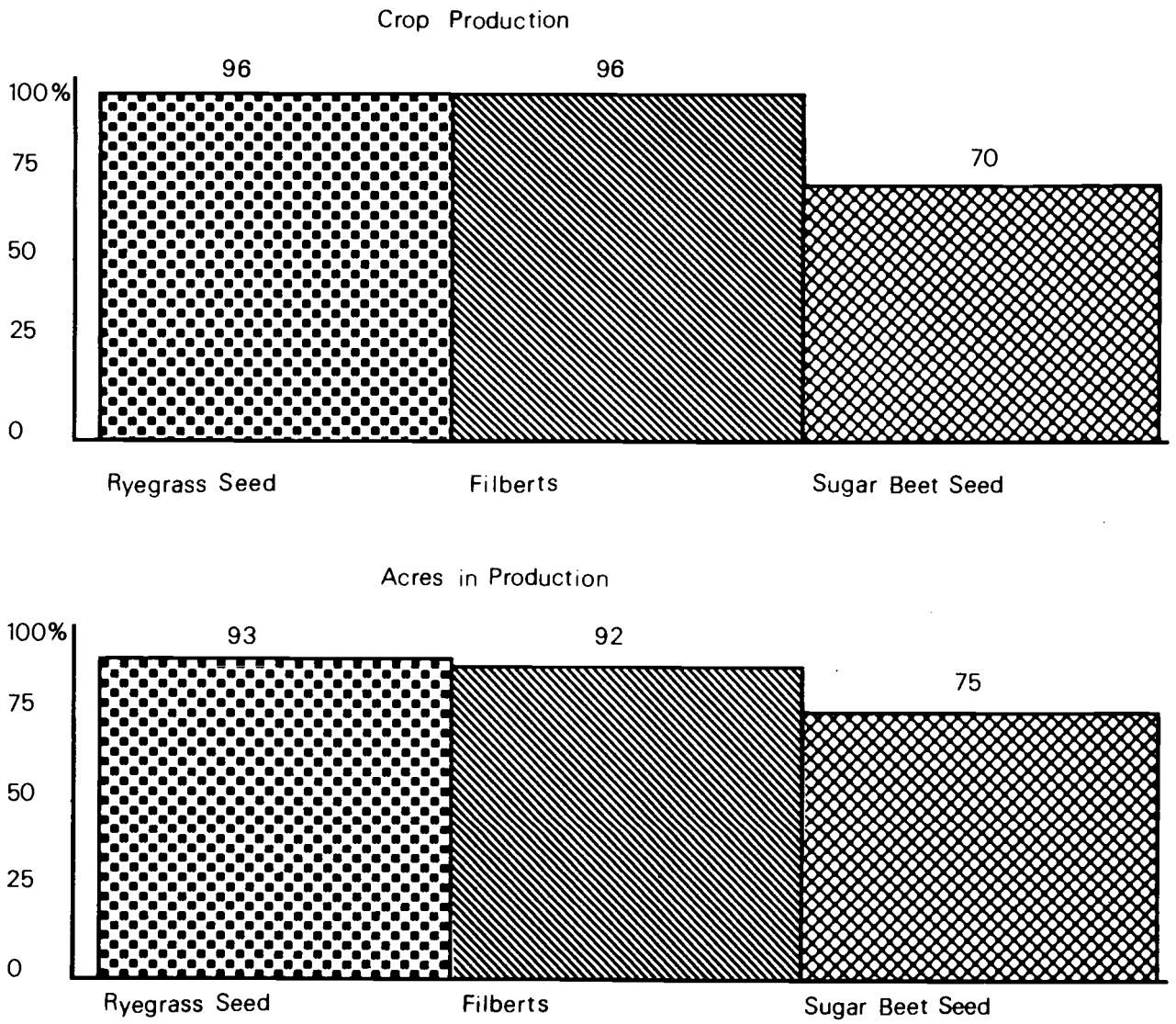
INTRODUCTION

Agriculture has been and is a vital segment of Oregon's economy. The market value of agricultural products is second only to forest products in Oregon, and the Willamette Valley counties (Benton, Clackamas, Lane, Linn, Marion, Polk, Washington and Yamhill) contribute significantly to that value. During 1978, this agricultural region produced 35% of the state's agricultural product market value on only 10% of the state's land in farms.[1] The valley's counties have also become a relatively specialized agricultural region; over 96% of the nation's ryegrass seed and filbert harvest, and over 70% of the nation's sugar beet seed was produced in the region during 1978. (Figure 1). While this region dominated the nation's acreages in these crops, it comprises less than one-five hundredth of the nation's land in farms.[2]

The Willamette Valley is also the destination of most migrants to Oregon. The temperate marine climate offers mild, wet winters and dry summers. The pleasing pastoral setting and high environmental quality are attractive to individuals seeking alternatives to congested urban centers in the eastern

FIGURE 1

SELECTED WILLAMETTE VALLEY CROP PRODUCTION AND ACREAGE AS PERCENTAGES OF TOTAL UNITED STATES PRODUCTION AND ACREAGE FOR RYEGRASS SEED, FILBERTS AND SUGAR BEET SEED, 1978



Source: U. S. Department of Commerce, Bureau of the Census, 1978 Census of Agriculture, Volume 1, Part 37 (Oregon), Tables 29, p. 144; 30, p. 145 and 32, p. 152, and Volume 1, Part 51 (United States), Tables 30, p. 173; 31, p. 176 and 33, p.197, April 1981.

United States and California. Most urban centers are in the valley; the five largest--Portland, Eugene, Salem, Springfield and Corvallis are all within 3 hours of each other. Population growth in the valley accounted for 67% of the state's growth in population between 1960 and 1980. And while an increasing percentage of the valley's population is considered urban, the rural population increase since 1960 is numerically significant (Table 1).

Most employment opportunities are generated where the people are. Total employment in the Willamette Valley grew 63% during the 1960-77 period, comprising 84% of Oregon's total employment growth for that period (Table 2). Since the economy is centered in the valley demand for land has been significant. The land conversion process from agricultural uses to urban and non-resource rural uses (especially residences) has therefore been more pronounced in this region than in the state as a whole.

Legislative responses to agricultural land conversion.

While the phenomenon of relatively rapid population growth and concurrent agricultural land consumption for other uses is not unique to Oregon, it elicited a unique series of legislative responses to the problem during the 1960s and 1970s. An early response occurred in 1963 with enabling legislation permitting farm use zones. Land within such zones was to be "exclusively used for farm use...and established only when such zoning is consistent with the overall plan of development of the county."[3] This legislation also provided for assessment of any land exclusively used for farming at its true cash value for farm use.

Most counties in Oregon did not, however, have overall plans for county development at this time. And since this act did not require that plans be developed, the farm use zone was not widely used.

TABLE 1

POPULATION GROWTH, WILLAMETTE VALLEY AND OREGON, 1960-1980

	Oregon		Willamette Valley	
	1960	1980	1960	1980
Total Population	1,768,687	2,633,105	645,486	1,225,886
Urban Population	1,100,122(62.0%)	1,788,354(67.9%)	354,854(55%)	856,089(30%)
Rural Population	668,585(38.0%)	844,751(30.1%)	290,632(45%)	369,797(30%)

Source: U. S. Department of Commerce, Bureau of the Census, 1980 Census of Population, Volume 1, Part 39, (Oregon), Table 3, p39-8, December 1981, and U. S. Department of Commerce, Bureau of the Census, Census of Population: 1960, Volume 1, Part 39, (Oregon), Table 6, p39-14, 1963.

TABLE 2

WILLAMETTE VALLEY AND OREGON EMPLOYMENT GROWTH, 1960-77

	1960	1970	1977
Oregon	682,300	802,800	1,043,000
Willamette Valley	485,600	612,720	789,820
Benton County	15,210	19,670	25,330
Clackamas County	327,300	401,400	503,000
Lane County	59,560	80,400	108,500
Linn County	19,710	25,150	33,070
Marion County	53,160	70,700	98,700
Polk County	1	1	1
Washington County	2	2	2
Yamhill County	10,660	15,400	21,220

[1]Data based upon Salem SMSA, which includes Marion and Polk Counties.

[2]Data based upon Portland SMSA, which includes Clackamas, Washington and Multnomah Counties, Oregon, and Clark County Washington.

Source: Economic Information Clearinghouse, Research and Agency Liaison Division, Oregon Department of Economic Development, Benton County Economic Information, Tables BTN-6, BTN-23; Clackamas County Economic Information, Tables PDX-3, PDX-10; Lane County Economic Information, Tables EUG-2, EUG-6; Linn County Economic Information, Tables LIN-6, LIN-23; Marion County Economic Information, Tables SLM-2, SLM-6; Polk County Economic Information, Tables SLM-2, SLM-6; Washington County Economic Information, Tables PDX-3, PDX-10, and Yamhill County Economic Information, Tables YMH-6, YMH-23, June 1979.

The 1969 legislative session recognized that local jurisdictions would need to be prodded into plan development. Senate Bill 10 required the Governor to "prescribe, amend and thereafter administer comprehensive land use plans and zoning regulations for lands not subject to [such land use controls] adopted pursuant to ORS 215" before December 31, 1971.[4] This threat of state imposed and administered land use controls provided most Willamette Valley counties with sufficient impetus to complete their first generation of comprehensive land use plans and zoning ordinances. Table 3 lists the date each Willamette Valley county's first comprehensive plan and zoning ordinance became effective.

The heyday of environmentalism during the 1970's saw a strengthening of Oregon's approach toward comprehensive land use planning. The 1973 legislature established the Department of Land Conservation and Development (DLCD) and gave that agency the power to promulgate rules as needed. DLCD was charged with the development of statewide planning goals and guidelines. Legislative guidance was provided on ten specific topics. The act also required all jurisdictions to prepare and adopt plans and ordinances consistent with DLCD's statewide goals and guidelines.[5]

The Oregon Agricultural Lands Protection Act was also adopted during 1973. The legislature's intent for retaining agricultural lands was clearly stated as conserving natural resources, maintaining the agricultural economy of the state and controlling suburban sprawl. Conversion of farm use zoned land to non-farm uses and rezones of such land accomplished at the owner's request became subject to stiffer tax penalties. The act also required counties to review certain land divisions.[6]

The last legislature to pass acts affecting statewide planning requirements met during 1977. That session clarified the status of the

TABLE 3

ADOPTION OF FIRST COUNTY COMPREHENSIVE PLAN, AND ADOPTION OF FIRST COUNTY COMPREHENSIVE PLAN WITH FARM USE ZONING

County	First Plan	First Plan with Farm Use Zoning
Benton	July, 1974	July, 1974
Clackamas	August, 1974	August, 1974
Lane	November, 1959[1]	June, 1970
Linn	March, 1972	March, 1972
Marion	May, 1972	May, 1972
Polk	November, 1970	November, 1970
Washington	September, 1959[1]	October, 1973
Yamhill	March, 1961[1]	February, 1976

[1]affected only portions of the county, lacked farm use zoning.

Source: County planning departments, personal communication, May, 1982.

statewide planning goals and guidelines, required local jurisdictions to develop comprehensive plans complying with the statewide goals, and required adoption of ordinances implementing the plans.[7]

County regulation of land zoned for farm use.

Two techniques have been developed as Willamette Valley county responses to the legislative intent to retain agricultural land; a "performance" style and a more traditional lot area standard. Marion County pioneered the first approach and, except for one hybrid Polk County zone, Marion County has remained the sole user. It permits parcel creation and development regardless of parcel area if continued farm use can be demonstrated.

Several reasons may be advanced as rationales for the more common use of lot area standards in farm use zones. Such standards can result in a land ownership pattern of relatively large holdings. Such a pattern minimizes parcel disintegration, facilitates farm management and leasing arrangements and, most important, serves to control the resulting density of development. It also imparts greater administrative direction on a process that is susceptible to tremendous political pressures.

The more common use of a lot area standard is, however, more likely due to political acceptability than to its value in retaining farm land. A lot area standard is a more indirect approach to land use regulation than the "performance" style. It presumes that farm use will result if development density is low enough and landholdings large enough. The lot area approach perhaps is less effective in retaining farmland, but it is also less noticeable to those who are regulated.

RESEARCH DESIGN

Purpose and Objectives for the Study

All counties but one in the state's most important agricultural region use lot area standards as their farmland retention technique. The purpose of this study is to investigate the value of such standards in retaining land in commercial agriculture. As objectives, this research seeks to:

1) reveal the creation of minimum lot area parcels over time;
2) identify the importance of minimum lot area parcels and freestanding (not contiguously owned) minimum lot area parcels; and
3) analyze extant economic activity on the freestanding parcels.

Methodology

Public records provide the basic data for the study. County zoning maps for Yamhill and Clackamas Counties were used to identify land zoned for farm use and minimum lot area parcels. Records held in county clerk and assessor offices were used to identify ownership of parcels and the year of parcel creation.[8] The importance of the phenomenon is identified through consideration as a proportion of the entire study area, and by classification of the minimum lot area parcels into acreage classes. Acreage classes were used since each county's lot area standard affects a range of parcel sizes--not just parcels at the lot area minimum. Each county requires governmental review whenever a parcel less than the standard is created; only a parcel at least twice as large as the standard can be partitioned without incurring a required governmental review.[9]

Four acreage classes were used in each county. Clackamas County acreage classes were: 20-25 acres; 25-30 acres; 30-35 acres and 35-40 acres. The minimum lot area standard in the Clackamas study area was 20 acres.[10] In the

Yamhill County study area the minimum lot area was 40 acres, and acreage classes consisted of 40-50 acres, 50-60 acres, 60-70 acres and 70-80 acres.[11] Freestanding minimum lot area parcels were also studied separately.

The creation of these parcels over time was analyzed in relation to the significant legislation mentioned above. The time periods identified were: prior to 1963; 1963-1973; 1973-1977 and 1977-June, 1978. Freestanding minimum lot area parcels were also evaluated separately.

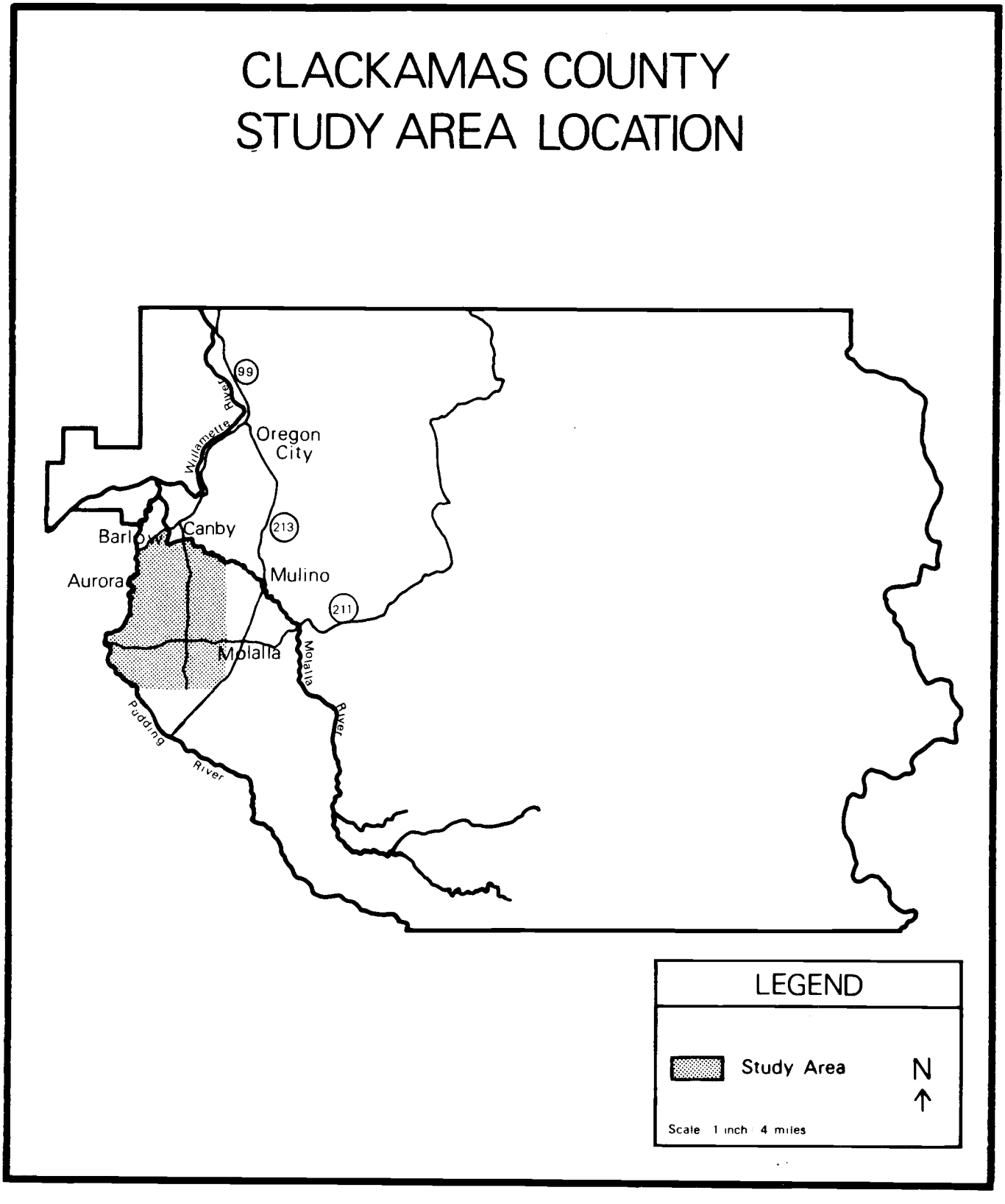
Extant economic activity was evaluated in each study area for freestanding parcels. A random sampling technique was applied to parcels within each acreage class and time period to identify the sample.[12] The Clackamas County sample consisted of 55 parcels. In Yamhill County, 31 parcels were part of the sample. These parcels were visited during August and September, 1978.

The Study Areas

The study areas were chosen for their proximity to the Portland Metropolitan Area. Both areas lie outside the urban growth boundary for the Portland Metropolitan Service District, but are quite immediate to that boundary.

The Clackamas County Study Area consists of the 41,800 acre area affected by the South of Canby Zoning Action ZC-11-76. This area became zoned for farm use through the efforts of a local citizens. It contains no other zones even though several uses not permitted in farm use zones existed prior to the zoning action. These "non-conforming" uses include sawmills, brick and tile manufacturers, taverns, restaurants, auto wrecking yards and repair shops, a building supply store, furniture store and a trailer court.[13] This study area is generally located south of Barlow, Canby and the Mollala River, west of Mulino and Mollala, and east of the Pudding River and Aurora (Figure 2). Oregon State Highways 211 and 170 are the major roadways within the study

FIGURE 2


CLACKAMAS COUNTY
STUDY AREA LOCATION
99
Willamette River
Oregon City
213
Barlow
Canby
Aurora
Mulino
211
Molalla
Molalla River
Pudding River
LEGEND
Study Area
N
Scale 1 inch 4 miles

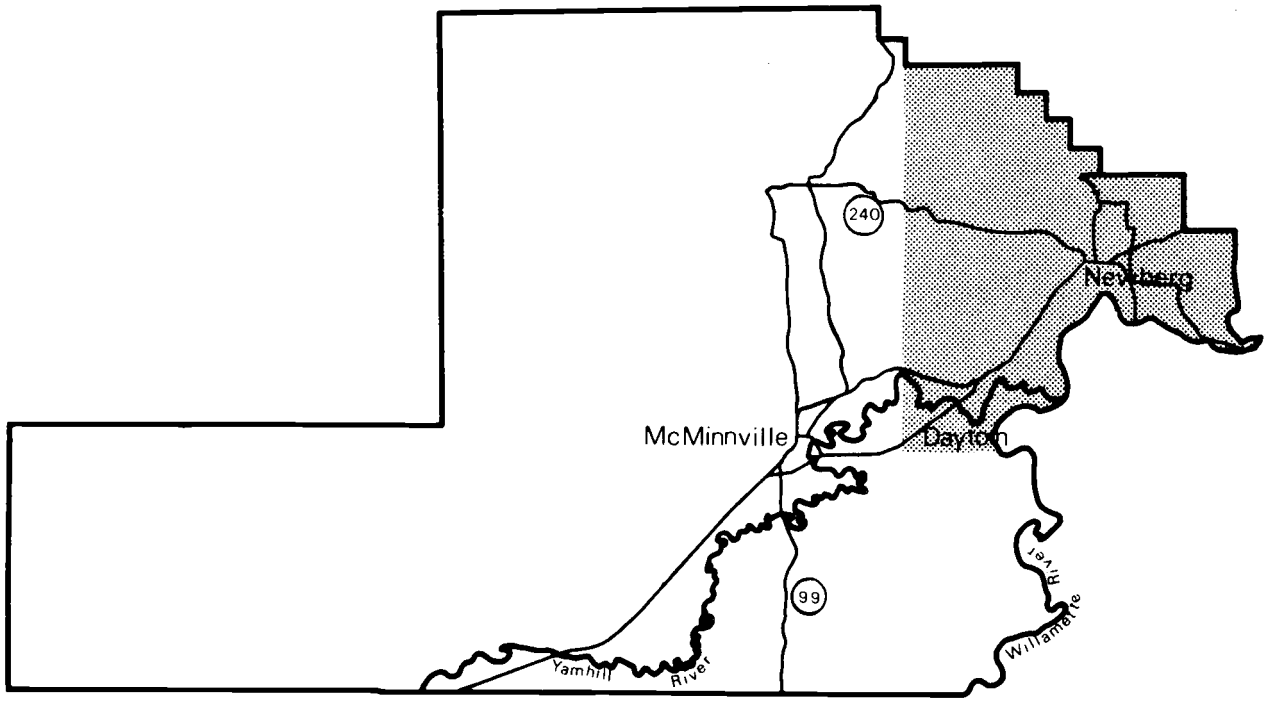
area; Oregon State Highway 99E provides the northwestern boundary. This study area exhibits a higher degree of accessibility than the Yamhill County study area due to a paved, well-developed farm-market road system.

Adoption of the 1976 Yamhill County Zoning Ordinance designated approximately 22,480 acres within the Yamhill County Study Area for farm use only. The general study area consists of the northeastern portion of the county (Figure 3). The 22,480 acres zoned for farm use is intermingled with other zones lying within the 74,880 acre general study area. The cities of Newberg, Dundee, Dayton and Lafayette lie within the general study area boundaries, but are not part of it. Oregon State Highways 99W, 219 and 240 are within the area.

The value of each study area for agricultural use may be summarized by reviewing extant soil associations. In fact, soil associations are the only information available for the Clackamas County Study Area. Sixty percent of that study area is considered to be Aloha association soils. These are mostly of agricultural capability Class II. They are somewhat poorly drained silt loams found on old alluvium with a seasonally high ground water table between December and April. Hillsboro soils, well-drained loams or silt loams, comprise 10% of the study area. These soils may be characterized as Class I and II soils not affected by high ground water. Ten percent of the area is also comprised of soils in the Concord-Clackamas association. These are poorly drained silts or gravelly loams having a seasonal ground water table near the surface. Concord-Clackamas soils are mostly of Class III capability. Woodburn-Willamette soils, moderate to well drained silt loams principally of Class I and Class II capability occupy 7% of the Clackamas County study area. Seven percent of the area is McBee-Chehalis type soils--moderate to well drained silty clay loams generally susceptible to flooding. These are mostly

FIGURE 3

YAMHILL COUNTY
STUDY AREA LOCATION



LEGEND

Study Area

N

Scale: 1 inch = 4 miles

Class II soils. The final 6% of the study area consists of Wapato-Cove soils--poorly drained silty clay loams susceptible to flooding with near-surface ground water tables. Both the McBee-Chehalis and Wapato-Cove associations are located on recent alluviums.[14]

Six soil associations are within the Yamhill County Study Area: Chehalis-Cloquato-Newberg; Wapato-Cove; Woodburn-Willamette; Laurelwood; Jory-Yamhill-Nekia and Willakenzie-Hazelair. Woodburn-Willamette soils cover the largest area (35%), and were discussed earlier. Colluvial soils occupy 57% of the study area, with Jory-Yamhill- Nekia soils dominating (26%). These are Class III and IV soils formed over basalt formations in the Oregon Coast Range foothills. They are well-drained, gently sloping to very steep clay loams over clay and silt loams over silty clay. Willakenzie-Hazelair soils, formed over sedimentary rock, occupy 21% of the Yamhill County Study Area. They are well-drained and somewhat poorly drained, gently sloping to steep silty clay loams and silty clay loams over clay. Laurelwood association soils are the last colluvial soil group and are formed in mixed materials. These Class III capability soils are well drained, gently sloping to steep silt loams over silty clay loams. They comprise 10% of the area. A minor portion of the area consists of Wapato-Cove soils (6%), whose characteristics were discussed above. Class I and II silty clay loams, silt loams and fine sandy loams of the Chehalis-Cloquato-Newberg association account for 3% of the study area. These are bottomland soils subject to flooding but are well to somewhat excessively drained.[15]

CREATION, SIGNIFICANCE AND USE OF MINIMUM LOT AREA PARCELS

Clackamas County Study Area

The creation of all Clackamas County minimum lot area parcels are categorized by acreage class and era of creation in Table 4. Over one-third of the parcels were created before the legislature authorized a farm use zone, and over 70% were created before 1973. Ninety-four percent were in existence before 1977, which is roughly when the South of Canby zoning action was taken. However, 65% were created during the post-1963 era of intense legislative concern over agricultural land conversion. This is remarkable when one recalls that nearly a century was required to create the other 35%.

Freestanding parcels are categorized in Table 5; almost 48% of all minimum lot area parcels are freestanding. Since these parcels account for a significant portion of the total, it is not surprising that the creation and acreage class representation closely mirrors the distribution for all the parcels. It is significant that nearly one parcel per month (0.88) has become freestanding since 1973. Freestanding parcels account for 52% of all minimum lot area parcels created since 1973.

Minimum lot area parcels in this study area are clustered at each end of the acreage spectrum. About one-third of all the parcels are between 20 and 25 acres in size, and one-third are between 35 and 40 acres. A similar distribution exists among the freestanding parcels.

Approximately 11,529 acres lie within minimum lot area parcels--28% of the 41,800 acre study area. Minimum lot area parcels numbered 386. This is 26% of the 1486 parcels found in the study area. Minimum lot area parcels had a mean parcel size of 29.87 acres; 28.13 acres was the mean for all parcels in the area. When the minimum lot area parcels and land area are extracted, the

TABLE 4

CLACKAMAS COUNTY MINIMUM LOT AREA PARCELS

BY ACREAGE CLASS AND ERA OF CREATION

Class	Era of Parcel Creation				
	Before 1963	1963-1973	1973-1977	1977-June, 1978	Total
20-25 acres	44	41	30	10	125 (32%)
25-30 acres	28	28	19	5	80 (21%)
30-35 acres	15	18	17	4	54 (14%)
35-40 acres	48	52	23	4	127 (33%)
Total	135 (35%)	139 (36%)	89 (23%)	23 (6%)	385(100%)

TABLE 5

FREESTANDING CLACKAMAS COUNTY MINIMUM LOT AREA PARCELS

BY ACREAGE CLASS AND ERA OF PARCEL CREATION

Class	Era of Parcel Creation				
	Before 1963	1963-1973	1973-1977	1977-June, 1978	Total
20-25 acres	23	15	16	6	60 (33%)
25-30 acres	9	15	7	3	34 (18%)
30-35 acres	6	6	9	3	24 (13%)
35-40 acres	26	26	13	1	66 (36%)
Total	64 (35%)	62 (34%)	45 (24%)	13 (7%)	184 (100%)

remaining 30,271 acres and 1,100 parcels produce a mean parcel area of 27.52 acres.

The Clackamas County sample of 55 parcels was evaluated during September, 1978. Table 6 presents the observed uses which may be compared to parcel size and era of creation. The distribution of sampled parcels is mapped in Figure 4, which also identifies each parcel's location. The primary land uses were wheat, hay and field crops, livestock, and grass seed and clover. Orchards and berries and row crops were of secondary importance (Table 7). The incidence of unused parcels was also significant; most of these were floodplain wetlands and riparian vegetation. One unused parcel was similar and adjacent to land in farm use. Based upon the emergent shrubs and trees, this parcel had not been in agricultural use for at least two years.

Yamhill County Study Area

Yamhill County minimum lot area parcels are categorized by era by creation and acreage class in Table 8. About one-fourth of the parcels existed before farm use zoning was established by the legislature, and 61% were created prior to the birth of DLCD in 1973. About three-fourths were created during the 1963-1977 period of legislative concern over farmland conversion and environmental quality.

Freestanding parcels are categorized in Table 9. These parcels dominate the study area's minimum lot area parcels; 88 of the 113 parcels, or 78% are freestanding. Eighty-two percent of the parcels created since 1973 are freestanding landholdings, and every parcel created during the 1977-June, 1978 era was freestanding.

Most of the parcels created lie in the two smaller acreage classes. Among freestanding parcels, nearly 40% were in the 50-60 acre class. About one-third were in the 40-50 acre class.

TABLE 6

OBSERVED LAND USE ON EVALUATED FREESTANDING PARCELS

IN CLACKAMAS COUNTY STUDY AREA

Parcel	Acreage Class/Parcel Size	Era of Creation	Observed Land Use
1	30-35a/33.5a	1973-1977	Tilled Field
2	20-25a/20.6a	1973-1977	Forest Nursery
3	30-35a/32.47a	1973-1977	Forest Nursery
4	20-25a/22.52a	1973-1977	Wheat
5	25-30a/27.5a	1963-1973	Dairy
6	20-25a/23.1a	1963-1973	Cattle
7	20-25a/21.1a	prior to 1963	Grass Seed
8	35-40a/39.7a	1973-1977	Grass Seed
9	35-40a/39.4a	1963-1973	Hay, Riparian Vegetation
10	35-40a/39.0a	1973-1977	Horses
11	25-30a/29.5a	1963-1973	Abandoned Field
12	35-40a/39.4a	prior to 1963	Hay
13	25-30a/26.1a	1973-1977	Grass Seed
14	35-40a/39.39a	prior to 1963	Tilled Field & Wheat
15	25-30a/28.8a	prior to 1963	Tilled Field & Wheat
16	20-25a/20.0a	prior to 1963	Corn
17	35-40a/39.2a	1963-1973	Walnuts & Hay
18	20-25a/20.4a	1973-1977	Clover

TABLE 6

OBSERVED LAND USE ON EVALUATED FREESTANDING PARCELS

IN CLACKAMAS COUNTY STUDY AREA (Continued)

Parcel	Acreage Class/Parcel Size	Era of Creation	Observed Land Use
19	20-25a/21.7a	1977-June 1978	Hay
20	35-40a/37.9a	prior to 1963	Field Crop
21	30-35a/32.1a	prior to 1963	Cattle
22	20-25a/21.6a	1963-1973	Nursery Stock
23	30-35a/31.1a	1963-1973	Wheat & Filbert Orchard
24	30-35a/30.31a	1977-June 1978	Goats
25	20-25a/20.6a	1973-1977	Wetland, Cattle Goats
26	25-30a/28.7a	1963-1973	Filbert Orchard
27	25-30a/29.6a	1963-1973	Horses & Cattle
28	25-30a/27.7a	1963-1976	Clover
29	35-40a/37.8a	1963-1973	Berries & Cattle
30	35-40a/36.7a	1973-1977	Wheat
31	20-25a/20.4a	1963-1973	Kropf Lumber Mill
32	35-40a/36.4a	1963-1973	Grass Seed
33	35-40a/35.1a	1963-1973	Unused Field
34	35-40a/38.5a	prior to 1963	Cattle
35	30-35a/32.4a	1973-1977	Clover
36	35-40a/35.8a	1963-1973	Corn & Clover
37	35-40a/39.4a	prior to 1963	Tilled Field

TABLE 6

OBSERVED LAND USE ON EVALUATED FREESTANDING PARCELS IN CLACKAMAS COUNTY STUDY AREA (Continued)

Parcel	Acreage Class/Parcel Size	Era of Creation	Observed Land Use
38	25-30a/29.7a	1963-1973	Berries & Filberts
39	35-40a/38.4a	1963-1973	Corn
40	30-35a/30.a	1973-1977	Corn
41	25-30a/27.6a	prior to 1963	Nursery Greenhouses
42	25-30a/27.4a	prior to 1963	Wheat
43	20-25a/21.34a	prior to 1963	Corn
44	20-25a/21.92a	prior to 1963	Poultry Hotels, Tilled Field
45	35-40a/38.9a	1963-1973	Grass Seed & Sheep
46	35-40a/39.5a	prior to 1963	Dairy
47	35-40a/39.0a	1963-1973	Clover
48	20-25a/21.5a	1973-1977	Christmas Trees & Cattle
49	30-35a/34.4a	1963-1973	Wetland
50	25-30a/29.9a	1973-1977	Hay & Cattle
51	30-35a/30.0a	1973-1977	Corn
52	35-40a/38.6a	1963-1973	Corn & Hay
53	20-25a/20.8a	prior to 1963	Grass & Seed
54	25-30a/27a	1977-June 1978	Berries, Cattle & Riparian Woodland
55	30-35a/30.1a	1977-June 1978	Berries & Riparian Woodland

FIGURE 4

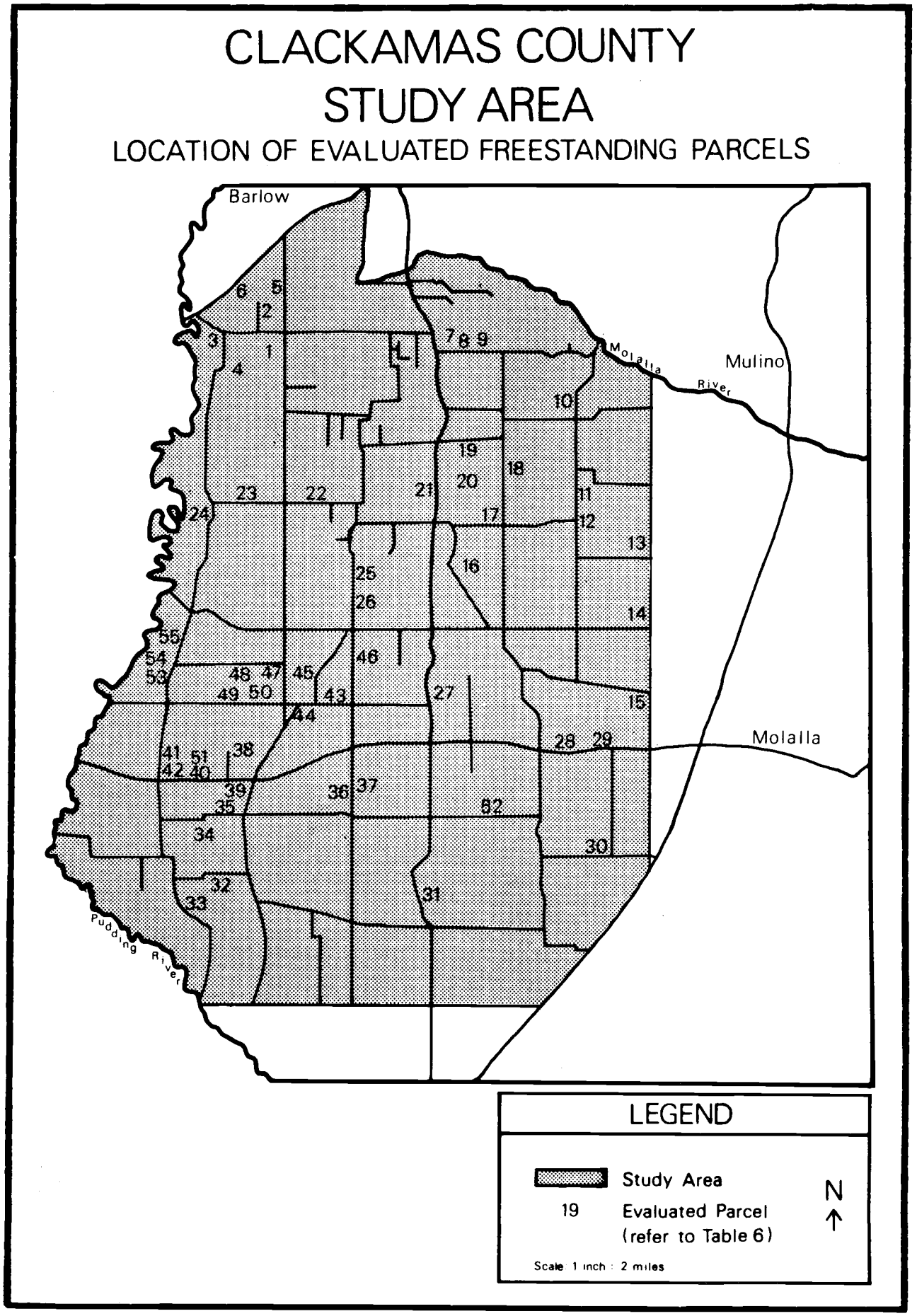

CLACKAMAS COUNTY
STUDY AREA
LOCATION OF EVALUATED FREESTANDING PARCELS
Barlow
Molalla River
Mulino
Molalla
Pudding River
LEGEND
Study Area
19 Evaluated Parcel (refer to Table 6)
N
Scale: 1 inch = 2 miles

TABLE 7

OBSERVED LAND USE BY ACTIVITY TYPE, CLACKAMAS COUNTY STUDY AREA

Activity	Units
Wheat, Hay, Field Crops	13
Livestock	13
Grass Seed, Clover	11
Orchards, Berries	8
Row Crops	7
Unused, Abandoned	6
Tilled Fields	5
Nursery Stock	4
Dairy	2
Christmas trees	1
Woodlots	1
Other	1

TABLE 8

YAMHILL COUNTY MINIMUM LOT AREA PARCELS BY

ACREAGE CLASS AND ERA OF CREATION

Class	Era of Creation				
	Before 1963	1963-1973	1973-1977	1977-June, 1978	Total
40-50 acres	9	11	11	6	37 (33%)
50-60 acres	9	13	12	4	38 (34%)
60-70 acres	5	9	6	2	22 (19%)
70-80 acres	6	6	2	2	16 (14%)
Total	29 (26%)	39 (35%)	31 (27%)	14 (12%)	113 (100%)

TABLE 9

FREESTANDING YAMHILL COUNTY MINIMUM LOT AREA PARCELS

BY ACREAGE CLASS AND ERA OF CREATION

Class	Era of Creation				
	Before 1963	1963-1973	1973-1977	1977-June, 1978	Total
40-50 acres	6	9	9	6	30 (34%)
50-60 acres	7	12	11	4	34 (39%)
60-70 acres	3	6	4	2	15 (17%)
70-80 acres	3	2	2	2	9 (10%)
Total	19 (22%)	29 (33%)	26 (29%)	14 (16%)	88% (100%)

Minimum lot area parcels occupied approximately 6336 acres of the 22,480 acre farm use zone in the study area, or 28%. The 117 parcels, however, accounted for only 17% of the 674 parcels. The minimum lot area parcels had a mean parcel size of 56.1 acres; the mean for all parcels in the study area was 33.4 acres. When the minimum lot area parcels were removed from consideration, the remaining 16,144 acres averaged 28.8 acres per parcel--roughly half the size of minimum lot area parcels.

The 31 sampled parcels in Yamhill County were visited during August, 1978. Observed uses are presented in Table 10, and may be compared to parcel size and era of creation. Each parcel's location may be identified by parcel number on Figure 5, which shows the distribution of sampled parcels in the study area. Wheat, hay and field crops, grass seed and clover, and orchards and berries were the predominant users of the study area's farmland (Table 11). Six of the eight parcels devoting land to orchards were producing nuts--filberts and walnuts. Only one parcel was no longer used. It had been an Italian Prune orchard, but was overrun with berry brambles and grass. Many of the remaining trees had broken limbs.

CONCLUSIONS

Three conclusions are readily apparent from this research. First, the land in question is overwhelmingly being kept in farm use. What is unknown, and not an objective of this research, is whether the types of agriculture practiced represent the fullest utilization of the soils' capabilities as based upon available markets for the products. Second, minimum lot area parcels play a conservative force on the land use pattern in each study area. In both counties the mean parcel size was larger for the minimum lot area parcels than for all the study area's parcels, or for the area's parcels

TABLE 10

OBSERVED LAND USE ON SAMPLED FREESTANDING PARCELS

IN YAMHILL COUNTY STUDY AREA

Parcel	Acreage Class/Parcel Size	Era of Creation	Observed Land Use
1	60-70a/68.4a	1963-1973	Tilled Field
2	50-60a/50.0a	1963-1973	Grass Seed
3	60-70a/67.7a	1963-1973	Wheat
4	70-80a/76.0a	prior to 1963	Clover
5	40-50a/48.9a	1977-June 1978	Wheat
6	40-50a/40.0a	1977-June 1978	Fruit Orchard (abandoned)
7	60-70a/60.44a	1973-1977	Clover
8	70-80a/79.4a	1977-June 1978	Clover
9	60-70a/64.7a	prior to 1963	Walnut & Filbert Orchard, Grass Seed
10	50-60a/54.1a	1963-1973	Walnut & Filbert Orchard
11	40-50a/44.8a	1963-1973	Fruit Orchard, Woodlot, Tilled Field
12	40-50a/45.9a	1977-June 1978	Filbert Orchard
13	50-60a/56.7a	1977-June 1978	Woodlot (being harvested)
14	50-60a/54.3a	1973-1977	Cattle and Woodlot
15	40-50a/40.0a	1973-1977	Hay

TABLE 10

OBSERVED LAND USE ON SAMPLED FREESTANDING PARCELS

IN YAMHILL COUNTY STUDY AREA (Continued)

Parcel	Acreage Class/Parcel Size	Era of Creation	Observed Land Use
16	50-60a/56.6a	1977-June 1978	Tilled Field
17	40-50a/46.6a	prior to 1963	Wheat
18	70-80a/75.4a	prior to 1963	Grass Seed, Wheat, Livestock
19	70-80a/73.6a	1963-1973	Hay & Woodlot
20	40-50a/43.0a	1973-1977	Grass Seed
21	50-60a/54.0a	1973-1977	Dairy and Corn
22	40-50a/41.57a	1963-1973	Christmas Trees
23	50-60a/44.19a	1963-1973	Fruit Orchard, Filbert Orchard, Cattle
24	50-60a/50.0a	prior to 1963	Grass Seed
25	40-50a/47.8a	1973-1977	Hay, Seed Warehouse, Clover
26	50-60a/59.5a	1973-1977	Wheat, Tilled Field
27	50-60a/55.4a	1963-1973	Field Crop
28	60-70a/62.2a	1973-1977	Filbert Orchard
29	60-70a/60.0a	1973-1977	Bush Beans
30	50-60a/50.0a	1973-1977	Walnut & Filbert Orchard
31	50-60a/54.9a	prior to 1963	Tilled Field

FIGURE 5

YAMHILL COUNTY STUDY AREA

LOCATION OF EVALUATED FREESTANDING PARCELS

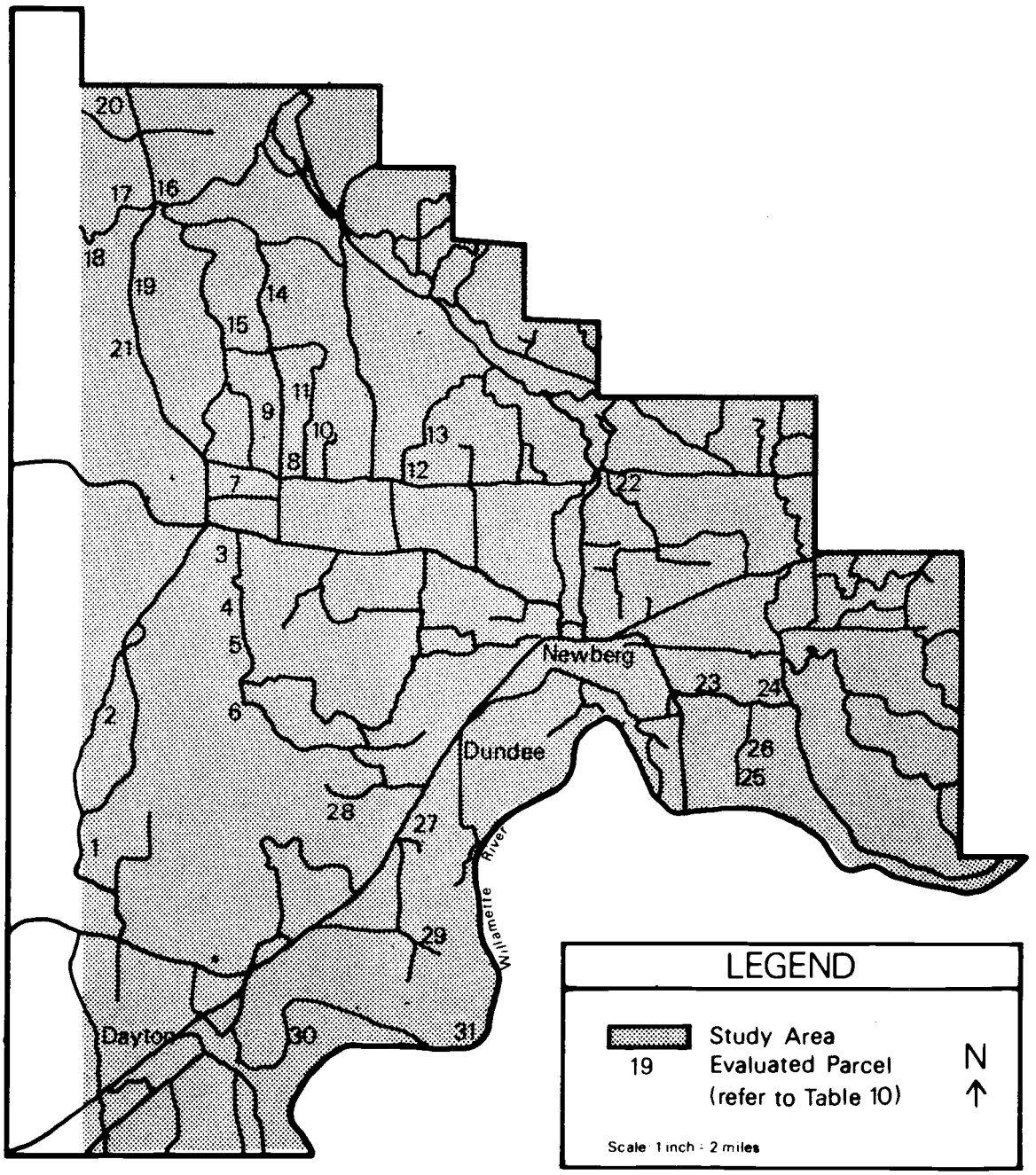


TABLE 11

OBSERVED LAND USE BY ACTIVITY TYPE, YAMHILL COUNTY STUDY AREA

Activity	Units
Wheat, Hay, Field Crops	9
Grass Seed, Clover	9
Orchards, Berries	8
Tilled Fields	5
Woodlots	4
Livestock	3
Row Crops	2
Dairy	1
Christmas trees	1
Abandoned, unused	1
Other	1

excluding minimum lot area parcels. This was especially clear in Yamhill County where the mean parcel area without minimum lot area parcels was half the mean area of minimum lot area parcels.

Third, freestanding parcels are becoming a larger portion of each study area. In Clackamas County such parcels have been created at a rate of approximately one per month, and comprise 52% of all parcels created since 1973. Freestanding parcels were the only ones created in Yamhill County after 1977.

Other conclusions are perhaps less evident. The agricultural land base in each study area is becoming fragmented. A new land ownership pattern is emerging from the freestanding parcel phenomenon--a pattern that is clearly more complex. That pattern will be one of relatively large land holdings, but the complexity of ownerships may pose an obstacle to the efficient, economic use of the land base.

Both areas were in a transition from purely agricultural uses to one of large lot fringe-suburban uses before the counties enacted minimum lot area standards. This transition process was largely the result of the study areas' proximity to the state's largest urban area. Evidence of this process may be seen in the comparisons between mean parcel sizes. This study suggests that a farm use zone with a minimum lot area standard should slow that transition process, but eventually will evolve into an agricultural land base fragmented into many individual ownerships.

FOOTNOTES

1. U. S. Department of Commerce, Bureau of the Census, 1978 Census of Agriculture, Volume 1, Part 37 (Oregon), Tables 1, p118 and 10, p124, April 1981.
2. U. S. Department of Commerce, Bureau of the Census, 1978 Census of Agriculture, Volume 1, Part 37 (Oregon), Table 10, p124, and Volume 1, Part 51 (United States), Table 1, p1, April 1981.
3. Oregon Laws, 1963. Chapter 577, p1141-1144 (House Bill 1230).
4. Oregon Laws, 1969. Chapter 324,
5. Oregon Laws, 1973. Chapter 80, pp127-145 (Senate Bill 100).
6. Oregon Laws, 1973. Chapter 503, pp1047-1054 (Senate Bill 101).
7. Oregon Laws, 1977. Chapter 664, pp598-607 (Senate Bill 570) and Chapter 764, pp745-750 (Senate Bill 846).
8. Parcel creation was considered to be when the parcel was reduced to the minimum lot area category, or when such a parcel became freestanding.
9. Clackamas County Board of Commissioners, Clackamas County Zoning Ordinance Amendment, Section 32.5, Lot Divisions, November, 1977 and Yamhill County Board of Commissioners, Yamhill County Zoning Ordinance, Ordinance 83, Section 11.310, p29, February, 1976.
10. Clackamas County Board of Commissioners, South of Canby Zoning Action, ZC11-76, September, 1976.
11. Yamhill County Board of Commissioners, page 31.
12. William H. Beyer, editor, Handbook of Tables for Probability and Statistics, second edition, The Chemical Rubber Company Cleveland, Ohio, 1968 as printed in William Mendenhall, Introduction to Probability and Statistics, Fourth Edition, Wadsworth Publishing Company, Inc., Belmont California, 1975, Table 13, Random Numbers pp440-442.

13. Clackamas County Planning Department, "South of Canby Zoning Action Staff Report," 1976.

14. Ibid, p.3.

15. U.S.D.A. Soil Conservation Service and Oregon Agricultural Experiment Station, Soil Survey of Yamhill Area, Oregon, 1974.