



Looking NE from summit of Marys Peak—Photo courtesy U. S. Forest Service

BENTON COUNTY

Long-Range Planning Report

1968

The citizens of Benton County have long been concerned with the development of the area. This concern has expressed itself in many constructive ways that have kept the county in the forefront of communities of Oregon striving to provide a stable, comfortable home and place of work for the people who live here.

Benton County has realized the need for extensive planning since 1924 when the first planning conference was held. Since that time similar conferences have been held in 1936, 1946, 1957, and now in 1968.

The conferences have been organized and conducted by the Benton County Farm and Home Planning Council and committees with the cooperation of the Oregon State University Extension Service and other federal, state and county agencies and private industry.

The value of reports contained in this publication will come from intelligent study and use of committee recommendations.

Funds necessary for the publication of the report were provided by the Oregon State University Extension Service and a local foundation. Copies of reports are available at the Benton County Extension Office in the Post Office Building, Corvallis, Oregon.

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Contents

| | | | |
|---|----|---|----|
| INTRODUCTION | 1 | PARKS AND RECREATION AND PROPERTY RIGHTS COMMITTEE REPORT | 32 |
| CONSUMER COMPETENCE COMMITTEE REPORT | 7 | Parks and Outdoor Recreation | 32 |
| Benton County Population Facts and Figures | 7 | Property Rights and Trespassing | 33 |
| Income | 7 | | |
| Consumer Problems | 8 | RURAL AREA LAND USE, ENVIRONMENT POLLUTION, AND TRANSPORTATION COMMITTEE REPORT | 34 |
| FAMILY HOUSING COMMITTEE REPORT | 10 | Land Use and Zoning | 34 |
| Location | 10 | Environment Pollution | 34 |
| Domestic Water | 10 | Transportation | 36 |
| Financing and Taxes | 11 | INDUSTRIAL DEVELOPMENT COMMITTEE REPORT | 37 |
| Building Costs and Codes | 11 | | |
| Housing Education | 11 | FISH AND WILDLIFE COMMITTEE REPORT | 40 |
| Realtors and Rents | 12 | Fish Resources | 40 |
| Senior Citizen Housing | 12 | Recommendations | 43 |
| HEALTH COMMITTEE REPORT | 13 | SOILS, IRRIGATION, AND DRAINAGE COMMITTEE REPORT | 50 |
| Medical Assistance | 13 | Soils | 50 |
| Preventive Measures | 13 | Irrigation | 51 |
| Environment Health | 14 | Drainage and Flood Control | 52 |
| County Health Services | 15 | | |
| FAMILY STABILITY COMMITTEE REPORT | 18 | FIELD CROPS COMMITTEE REPORT | 55 |
| Today's Family in Benton County | 18 | General Situation | 55 |
| Counseling Services for Benton County Families | 19 | Cereal Grains | 56 |
| Services for Needs of Family Members | 20 | Weed Control | 56 |
| Programs Dealing with Family Life Education | 21 | Seed Crops | 56 |
| YOUTH COMMITTEE REPORT | 23 | Forage Crops | 58 |
| Education | 23 | Hay | 59 |
| Youth Organization | 25 | HORTICULTURE COMMITTEE REPORT | 60 |
| Youth Problems | 26 | POULTRY COMMITTEE REPORT | 62 |
| PUBLIC SERVICES, TAXATION AND PUBLIC FINANCES, AND SCHOOL COMMITTEE REPORT | 28 | LIVESTOCK COMMITTEE REPORT | 64 |
| Public Services | 28 | General Livestock | 64 |
| Taxation and Public Finances | 29 | Sheep | 64 |
| Schools | 30 | Beef | 65 |
| | | DAIRY COMMITTEE REPORT | 67 |

Introduction

The area of Benton County was originally inhabited by the Klikitat Indians, who rented the area from the Calapooia Indians for use as a hunting ground. French-Canadian trappers visited the region at an early date and were followed by white settlers, who came south from Oregon City, at the end point of the Oregon Trail. The first settlers took out land claims in 1845. Among the first settlers were Thomas D. Reeves, Andrew Foster, and John Lloyd, who settled in the area northwest of Monroe; Wayman St. Clair, who located near the present site of Philomath; and Joseph C. Avery and James L. Mulkey, who took out claims located just north of the mouth of Marys River. Many other settlers soon followed. During the succeeding years, the California gold rush lured a number of settlers to the Sacramento Valley. In the fifties more and more settlers arrived, and towns sprang up in many parts of the county.

Benton County was officially created on December 23, 1847, by an act of the Provisional Government, as the seventh county to be organized in the Oregon Territory. The county listed 2,479 residents at the time Oregon attained statehood. The 1860 census gave Benton County a population of more than 3,000 with a total number of voters recorded at 748.

The first road through the county was opened in 1852. For a time, Corvallis (then called Marysville) was considered the head of navigation on the Willamette, and freighters made the town the northern terminus of a profitable pack-train and stage-line business extending south into California. After the end of the Indian wars in Southern Oregon, more roads were built.

As early as 1853, when the Oregon Territorial Legislature tried to initiate construction of a university at "Marysville", Corvallis was marked to be a center of higher education. Oregon State Agricultural College came into being in 1868, when it was formed from a Methodist school, Corvallis College. In 1887, the cornerstone for the administration building on the campus was laid.

The stern-wheel steamers that moved freight along the Willamette River were drawn to a standstill in the county in 1879 when the first train from Portland rolled into Corvallis, bringing the impetus for growth and development.

In 1900, 1,819 of the 6,607 population lived in the county seat. The population rose to the following levels:

39,165 in 1960; 41,100 in 1965; with projections of 48,000 for 1970 and 73,600 for 1985.

Many interesting details of early Benton County history can be found in "The History of Benton County." The historical society also has many items of interest.

LOCATION AND SIZE

Benton County has a total land area of 668 square miles or 427,520 acres, ranking 33rd in the state according to size. The county is bordered in the south by Lane County, in the north by Polk County, and in the west by Lincoln County. Most of the county, 72 percent, is located within the Willamette River Basin, and the remaining 28 percent is situated in the Mid-Coast Drainage Basin.

CLIMATE

Benton County is a relatively homogeneous area with respect to climate. The movement of very moist maritime air from the Pacific Ocean across the Coast Range produces some very heavy precipitation near the crest of the range. One annual total of close to 170 inches is on record, and a period-of-record annual average of 125 inches is established for a station in the Coast Range. From the crest there is a decrease of rainfall downslope to the valley floor where annual totals average about 40 inches.

Most of the precipitation occurs during the winter. In the valley, about 70 percent of the annual total occurs between November and March (inclusive), while only 5 percent occurs during the three summer months. On the average there are only two to four days during the year with measurable amounts of snow, and this snow usually melts within a day or two. The few thunderstorms each year are not generally severe and seldom cause any damage.

The seasonal variations in temperatures are not as marked as those in precipitation. The range in mean temperatures between the coldest and warmest months is just under 30 degrees. Maximum temperatures of 100 degrees or more are very infrequent, averaging less than one occurrence per year for the past 75 years. Minimum temperatures below zero are even more infrequent, occurring in about one year out of 15 on the average. At Corvallis, the average length of time between killing frosts is 215 days. The latest killing frost on record (since 1900) in spring was May 31, and the earliest in fall was September 24.

Weather Stations

| Station | Latitude | Longitude | Elevation |
|-----------------------------------|----------|-----------|-----------|
| Bellfountain ISW | 44 21 | 123 23 | 340 |
| Corvallis | 44 34 | 123 16 | 260 |
| Corvallis B--Experiment Area . . | 44 34 | 123 15 | 215 |
| Corvallis State College | 44 38 | 123 12 | 225 |
| Corvallis Water Bureau | 44 31 | 123 27 | 592 |
| Philomath 2 SE | 44 32 | 123 20 | 240 |
| Summitt | 44 38 | 123 35 | 746 |

1965 Average Temperatures and 1965 Total Precipitation

| Station | Temperature °F. | Precipitation Inches |
|--|--------------------|-------------------------|
| Bellfountain | ----- | ----- |
| Corvallis | ----- | 35.24 |
| Corvallis B--Experiment Area | ----- | ----- |
| Corvallis State College | 52.3 | 37.12 |
| Corvallis Water Bureau | 52.0 | 57.00 |
| Philomath 2 SE | ----- | 31.11 |
| Summit | ----- | 63.66 |

Freeze Data - 1965

Date - Last spring minimum of:

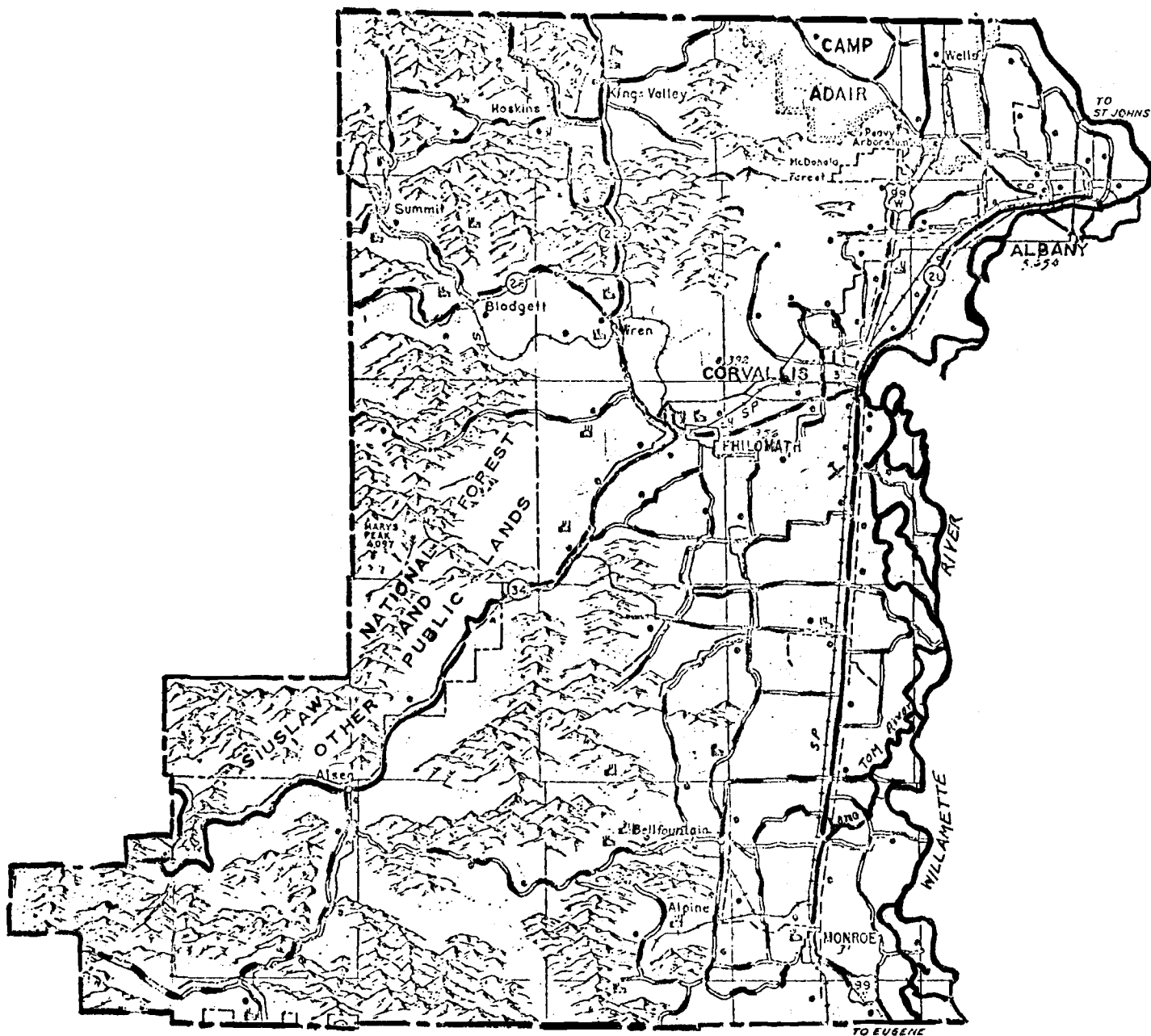
| Station | 16° or below | 20° or below | 24° or below | 28° or below | 32° or below |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Corvallis State College | None | None | None | 3-19 | 5-6 |
| Corvallis Water Bureau | None | None | None | 4-6 | 5-15 |

Date - First Fall Minimum of:

| | 32° or below | 28° or below | 24° or below | 20° or below | 16° or below |
|-------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Corvallis State College | 11-25 | 12-13 | 12-16 | None | None |
| Corvallis Water Bureau | 11-26 | 12-13 | 12-16 | 12-16 | 12-20 |

Median Dates of Last Spring-and First Fall Occurrence Corvallis, State College, 39-Year Record

| | 24° F. | 28° F. | 32° F. |
|------------------------|---------|---------|---------|
| Last spring occurrence | Jan. 28 | Feb. 27 | Apr. 15 |
| First Fall occurrence | Dec. 17 | Nov. 17 | Nov. 1 |



Benton County

ESTIMATED LAND OWNERSHIP IN BENTON COUNTY
1968

Acres

Total private land area 310, 670

Total public owned land area

| | | |
|---------|---------|----------|
| Federal | 81, 108 | |
| State | 28, 252 | |
| Local | 7, 490 | 116, 850 |

Total county land area 427, 520

Public Lands

Federal

| | | |
|---------------------------|------------|---------|
| Bureau of Land Management | 51, 710 | |
| USFS & O&C controverted | 17, 526 | |
| Public Domain | 5, 757 | |
| Wildlife Refuge | 4, 329 | |
| Military - Air Force | <u>481</u> | 81, 108 |

State

| | | |
|----------------------------------|---------------|---------|
| State forests & State Land Board | 9, 393 | |
| Game Commission | 2, 300 | |
| National Guard | 380 | |
| State Highways | 1, 904 | |
| OSU: McDonald Forest | 6, 761 | |
| Adair Tract | 6, 240 | |
| Campus, other exp. station | <u>1, 274</u> | 28, 252 |

Local

| | | |
|--------------------------|------------|------------------------|
| Cities <u>1</u> / | 4, 150 | |
| County roads (460 miles) | 2, 790 | |
| Public schools | <u>550</u> | <u>7, 490</u> 116, 850 |

Private Lands

| | | |
|--------------------------------|----------|----------|
| Land in farms (1964 ag census) | 207, 633 | |
| Private forest lands | 151, 000 | |
| Other privately owned lands* | 15, 000 | 378, 633 |

*About 3, 000 acres are occupied by rural homes not included in ag census. An equal or larger amount partially included in the census and partially not are standing unused awaiting rural development. Private lands in cities and towns total about 6, 000 acres. Industrial and other commercial lands outside

cities occupy several thousand acres.

The discrepancy between the 310,000 acres of privately owned land and the 60-65 thousand more acres estimated by kind of use is mostly accounted for by overlapping between land in farms and forest lands.

1/ City-owned land, not land in cities.

ESTIMATED GROSS CASH FARM INCOME

| Benton County | | | |
|--------------------------------|--------------------------------|-----------|--------------------|
| Item | 1958 (Thousands of Dollars) | 1968 | % Change <u>1/</u> |
| Animal Products | | | |
| Cattle and calves | (| \$ 916) | |
| Sheep and wool | (\$1,142 | 378) | + 32% |
| Swine | (| 215) | |
| Dairy products | 1,315 <u>2/</u> | 868 | - 34% |
| Poultry | 920 | 426 | - 54% |
| Misc. animal products | 111 | 209 | + 88% |
| Federal lamb and wool payments | 58 | 22 | - 62% |
| | \$3,546 | \$ 3,034 | - 14% |
| Crops | | | |
| Vegetables and potatoes | \$ 850 | \$ 2,550 | + 200% |
| Seed | 1,371 | 2,143 | + 57% |
| Spec. field crops | (| 787) | |
| Grain | (1,610 | 778) | + 16% |
| Hay and silage | (| 297) | |
| Farm forestry products | 375 | 400 | + 7% |
| Tree fruits and nuts | 295 | 316 | + 7% |
| Spec. horticulture crops | 387 | 300 | - 23% |
| Small fruits | 137 | 285 | + 108% |
| Federal crop payments | 109 | 214 | + 96% |
| | \$5,134 | \$ 8,070 | + 57% |
| TOTAL | \$8,680 | \$ 11,104 | + 28% |

1/ Comparative change, 1958 to 1968, in percent.

2/ Includes value of dairy animals sold.

FARM CHARACTERISTICS 1/

Benton County

| | | 1954 | 1964 |
|----------------------------------|---------|----------|----------|
| Number of farms <u>2/</u> | | 1,153 | 858 |
| Total land in farms | (acres) | 214,342 | 207,633 |
| Ave. size of farm | (acres) | 186 | 242 |
| Value of farm land and buildings | | \$24,982 | \$50,973 |

Farms by Size

| | | | |
|-----------------------|----------|-----|-----|
| Under 10 acres | (number) | 161 | 71 |
| 10-99 | (number) | 482 | 407 |
| 100-499 | (number) | 432 | 296 |
| 500 plus | (number) | 78 | 84 |
| Commercial farms | | 658 | 360 |
| Other farms <u>3/</u> | | 495 | 498 |

Commercial Farms by Economic Class 4/

| | | | |
|--|----------|-----|-----|
| Gross farm sales of less than \$2,500 | (number) | 156 | 80 |
| Gross farm sales \$2,500 - \$10,000 | (number) | 328 | 145 |
| Gross farm sales - \$10,000 plus <u>5/</u> | (number) | 174 | 135 |

1/ Source U.S. Agricultural Census

2/ Farm definition changed between 1954 and 1959 - becoming more restrictive.

3/ Gross farm sales less than \$2,500, or if less than \$2,500, farm gross is less than off-farm income.

4/ Estimated from 20% sample.

Consumer Competence Committee Report

Benton County Population Facts and Figures

The population of Benton County was about 47,000 in 1966. Approximately half the total population lives in urban areas, 10 percent live on farms, and the remaining 40 percent make up the rural nonfarm population. It has been estimated that by 1985 the population in Benton County will be 100,000.

The recent population growth in Benton County has been tremendous. Between 1960 and 1965, the county growth rate was 17 percent. This compares to a 12 percent increase for Oregon and an 8 percent increase for the nation during the same period. The number of household units in 1967 was 13,000.

The composition of Benton County's population by age and sex differs in percentages in certain categories when compared to that of the state because of presence of Oregon State University. About 33 percent of the county's population is under 18 years of age; 60 percent between 18 and 64; and the remaining 7 percent 65 years and over. The median age in Benton County is 23.7.

HOME CONSTRUCTION

Home building continues on the increase in Corvallis and vicinity. A projected figure for Corvallis building is at least 175 residential dwellings per year, or approximately a 4 percent average annual increase. Multiple dwelling building is on a sharp increase as shown by the following figures.

1960 -- 10 complexes with 47 units

1966 -- 20 complexes with 219 units

1967 -- 30 complexes with 387 units

This trend is expected to continue. No figures are available outside the city limits.

Income

EFFECTIVE BUYING INCOME

The average income per household in Benton County is \$9,440. This figure is at such a level because the Oregon State University campus and off-campus payroll is prepared in Corvallis and can be deposited in local banks for transfer throughout the state. Average household income is also raised somewhat in Benton County, where 37 percent of the married women are employed away from home as compared to 32 percent for a national average.

1963 household income by percentage groups in Benton County follows:

| | |
|---------------|-------|
| \$ 0 - 2,499 | 21% |
| 2,500 - 3,999 | 15.5% |
| 4,000 - 6,999 | 29.9% |
| 7,000 - 9,999 | 13.3% |
| 10,000 - over | 20.3% |

WHERE CONSUMERS SPEND RETAIL MONEY

The following Corvallis retail sales estimate shows the amount and percentage of consumer spending in various categories:

Retail Sales Estimate

| | | |
|--|--------------|---------|
| Food | \$15,238,000 | 26.33% |
| Eating and drinking | 3,709,000 | 6.41% |
| General merchandise | 6,775,000 | 11.71% |
| Apparel | 2,422,000 | 4.22% |
| Furniture | 2,504,000 | 4.33% |
| Automobiles | 16,146,000 | 27.92% |
| Gas stations | 4,610,000 | 7.97% |
| Lumber, bldg. materials, hdwe. | 2,880,000 | 4.97% |
| Drugs | 3,616,000 | 6.24% |
| Total retail sales | \$57,900,000 | 100.00% |

AID TO LOW-INCOME FAMILIES

Welfare Case Load of Benton County

In June, 1968, there were approximately 15 general welfare cases per month in which an average of 50 people were involved. An average of 70 persons per month was provided old-age assistance.

There were 70-75 Aid to Dependent Children cases, in which there are about five children per case. This could mean 350-375 children each month.

Aid to blind persons averages two per month and aid to the disabled, 30-35 persons per month.

Nursing-home care and Medicare involved 60-65 cases per month.

Social Security Information

Benton County Social Security Recipients

| Case | Total outlay/month | Average payment |
|-------|--------------------|-----------------|
| 4,280 | \$336,357.00 | \$78.59 |

Children of retired individuals: 490 children, outlay/month \$33,732

Children of disabled individuals: 97 children, outlay/month \$3,283

Survivors' benefits -- widows 60 and over: 420 persons, outlay/month \$3,283

Disabled beneficiaries: 259 persons, outlay/month \$17,806, average pay \$68.75

Young widows with minor children: 77 widows, outlay/month \$5,842

Dependent parents: 2, outlay/month \$134

Retired workers: 2,561 retired, outlay/month \$225,000

Wives of retired workers: 471 wives, outlay/month \$26,165

YOUTH AND THEIR MONEY

The youth of the 60's is, as stated in the NEA booklet "Youth and Money," the offspring of parents who were known in their teen years as "children of the depression." They were youngsters who lived through and fought World War II. The young people of today live in a time of abundance. Most do not understand going without. They have known good times. In turn, they look to the future with optimism. Money has always been around -- it will be here in the future. They have the security of knowing that if all their money is spent, mom and dad or some family member can be turned to for assistance. In most cases, they do not have to contribute to the support of the family. They have a completely disposable income. Necessities such as food, clothing, education, etc., are paid for by parents.

The impact of youth spending is felt not only by their own spending but the influence is felt on family expenditures in type and model of car, TV, foods, appliances, vacations, and other areas of family consumption.

Consumer Problems

MONEY MANAGEMENT AND DECISION MAKING

Money management is the one greatest consumer problem. This is illustrated by a recent report of the Corvallis Credit Bureau, which listed the 13 most common causes of bankruptcies filed in the order of their frequency: money management, credit too easy, medical bills, wage garnishment, divorce and domestic problems, dishonesty and irresponsibility, aggressive collection agency, lack of proper counseling by attorneys, moral decay, seasonal employment, bankruptcy too easy, early marriages, deficiency judgments.

Over 50 percent of all bankruptcies reported were instigated by people with income of \$2,000 to \$6,000 per year. Occupations pertaining to the lumber industry were listed most often by those taking bankruptcy.

There are 23 lending agencies in Benton County including banks, savings and loan companies, credit unions, finance companies, mortgage companies, insurance companies and realtors.

There is no agency in the county where an individual who is having financial problems may obtain free legal counseling.

Another consumer problem is to know how to judge objectively which product to buy, taking into consideration which will best suit the needs of the consumer, what he can afford, and where to get the information to help make his decision.

Today's consumer has more leisure time available than ever before. He needs to decide how much money can be budgeted for leisure equipment and activity.

The young people, those under age 21, form a very large part of the consumer population. These young people are often poorly informed on the value of money and how to manage it.

The senior citizens and families on social security have problems while on a fixed retirement income with a constant rise in living costs.

RECOMMENDATIONS

A broad educational program needs to be introduced to reach as many people in as many age groups as possible. This program could be carried out through the following means:

.... Elementary and secondary schools in the county should include consumer economics with emphasis on personal and family money management.

.... The Extension Service could keep up-to-date information available to guide families who are making major purchases such as appliances, furniture, carpeting, or a home.

.... The local newspaper should print consumer information on a regular basis. This could be in the form of regular articles running in a series of occasional informative articles.

.... The Oregon Consumer League is encouraged to work for legislation and education of the consumer.

.... Sales personnel should have more training on the products they sell. Two major consumer needs in Benton

County are counseling services for money management, job training, and employment. People also need more advice and information in order to make decisions on products and services. The social, economic, and technological changes occurring each create doubts and questions.

....Young people and teenagers need more guidance and help to develop sound money management practices.

References

1. Oregon State Center for Population Research and Census
2. Corvallis City Planning Administration
3. Credit Bureau of Corvallis "Surveys of Buying Power Statistics -- Edition of 1967"
4. Oregon State Employment Service, Corvallis

5. Benton County Welfare Office, Spring 1968

Committee Members

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Consumer education results are at work as father and daughter go shopping in one of the many centers to be found in Benton County.

Family Housing Committee Report

There were 10,300 single-family dwelling houses in Benton County in 1968. A total of 6,599 houses were in the following towns: 50 Alsea, 109 Monroe, 420 Philomath, and 6,020 Corvallis. An estimated 750 houses were in suburban areas or rural areas immediately adjacent to smaller towns, while 3,012 houses were considered strictly rural. There were 323 multiple-housing units, which include two or more units, exclusive of university dormitories. Since 1940, 1,990 apartments in multiple housing have been add-

ed. The projected demand for the number of dwelling units by 1985 is 21,000 family houses and 650 apartments.

Approximately 1,300 mobile homes are listed in Benton County, all of which are required to meet county sanitation requirements. Seven trailer courts now operate in Benton County.

The preceding figures include off-campus facilities for student housing. There is a shortage of single-family rentals in the entire county.

Location

From the public viewpoint, new rural and suburban housing development can be a serious problem to our industrial, educational, and local governmental functions unless housing is located in some pattern of orderly development. Lack of a systematic procedure for new housing locations creates traffic and road problems, may interrupt the operations of industry, and can take good agricultural land out of production. Location of housing projects on flood plains can create costly upkeep for the individual, may create sewage and water supply problems, and may increase tax costs to the county and city governments. Right-of-ways can cause a problem in some areas suitable for development.

Families have been moving from rural areas for the last 60 years; however, this trend has recently reversed itself.

RECOMMENDATIONS

.....New houses should be located in an area suitable for residential use and on our lower grade, well-drained soils such as the hills to the west of our more populated areas. The committee recommends that people avoid the flood plain for building.

.....Access to residential housing on highway frontage should be limited. Construction of single or group units should be in accordance with present or future road and street plans. The individual who constructs or purchases a house in a rural or city area should be sure there is a recorded right-of-way to that property. People considering a move to the country should be aware of hidden factors -- travel costs; upkeep of rural acreage, fencing, private roads, etc.; and availability of fire protection.

Domestic Water

An individual uses 60 to 75 gallons of water per day for household purposes. A minimum flow of five gallons per minute with a storage capacity of 200 gallons is adequate for a single household unit with a family of five. However, an additional amount of 20 gallons per minute is considered adequate for purposes other than immediate individual uses -- yard, garden, etc. Domestic water supplies depending on wells and springs are a problem with many residences.

Most community and city water systems provide adequate amounts of water for present needs with sufficient pressure to take care of dwelling requirements except for a few situations of which the managers of water departments are aware. Expanding housing requirements cannot be met without an adequate water supply. Sanitary codes for location of individual water sources in relation to sewage disposal are in effect on a county-wide basis. Codes are administered by the County Health Department. Water quality in general is good, but if a mineral or bacterial problem exists, it can be corrected with water softeners and chlorinators. In certain locations north of Corvallis there are salt wells.

RECOMMENDATIONS

.....A county-wide domestic water supply-demand inventory should be made by the county court cooperating with local, state, and federal agencies. Prospective buyers should be aware of the county water situation. Development of community water systems and expansion of municipal systems are a major problem which people in Benton County must consider to meet the population growth and increased water demands. No area can be expanded without an adequate supply of good quality domestic water.

.....The Soap Creek, Mt. View, and North Corvallis areas should investigate community water programs. The City of Corvallis water system must have a greater supply to serve the Philomath area and a portion of Corvallis. A part of the Corvallis water system is in need of improvement. Monroe, Alsea, and North Albany have adequate water systems allowing for expansion.

.....Pump meters should be separate from the house meter to provide better fire protection for the home. A Corvallis fire department station is recommended for north of Circle Drive.

.....Water should be periodically tested for bacteria count. Mineral content can be determined at no cost at most establishments selling water pumps and related supplies.

Financing and Taxes

The total value of all single-family dwellings in Benton County is \$114,612,000. Taxes derived from single dwellings total \$2,292,240, with Oregon State University dormitories and military establishment housing exempt from tax rolls.

Approximately 80 percent of the houses in Benton County have some form of mortgage. These houses have an average value of \$12,000, exclusive of land. Taxes and insurance, depending on the code are, are now \$450 per year (1968) for an average house. At present, interest rates are 7 3/4 to 8 percent. Insurance costs will vary with the construction and in relation to available fire protection facilities. About 20 to 35 percent of a family's income can be spent on housing (usually 20 to 25 percent.) Local banks, insurance companies, savings and loan companies, investment companies, state and federal housing programs, and individuals lend money for housing.

RECOMMENDATIONS

.... Purchasers of houses should study thoroughly their incomes financial obligations, costs of insurance, and maintenance of the house before buying either on contract or for cash. The purchase contract or agreement should always be read carefully and understood by the purchaser. A bona fide appraiser and a licensed surveyor should be consulted prior to any written agreement. Taxes are a never-ending, inescapable cost, and individuals need to study and know what tax increase proposals will do to their property and for their community. Future improvements and assessments such as streets, sewers, and sidewalks should also be considered.

Building Costs and Codes

Corvallis building costs are about 15 percent higher than in other areas of the Willamette Valley. Reasons are higher land value and the highest per capita income in the state. Appreciation in the Corvallis area is greater than in other areas because of active housing demand.

RECOMMENDATIONS

.... Whether a house is being purchased or constructed, the plans, costs, structural faults and value of land need to be known. There can be some savings made in building costs by using certain materials, dealing with contractors who do a large volume of business, and developing housing in tracts or in areas adjacent to existing housing. It is desirable to investigate more than one builder when constructing a new house or remodeling. Precut housing is expected to become more popular.

In rural areas, county sanitation and state electrical and plumbing codes are enforced. Some rural properties have certain building specifications. Building codes are useful to avoid faulty construction and to protect homeowners' financing and selling of property. Codes vary throughout the state. A uniform code tends to protect contractors and reduce building costs and maintenance for the owner.

RECOMMENDATIONS

.... The committee recommends that: building meet FHA standards or better; Benton County should adopt a building code; and uniform building codes should be adopted on a state-wide basis.

Housing Education

Housing education is needed for new people coming to Benton County, newly married couples, families wishing to build new homes or change residences, and older families moving to apartments or retirement homes. Many of the housing problems and requirements can be brought to the individual's attention through Extension classes on houses and Extension bulletins.

RECOMMENDATIONS

.... The committee recommends that the Oregon State University Extension Service and other departments continue to publish and publicize bulletins and circulars about housing and hold annual classes and short courses on housing -- including landscaping, outdoor living and utility areas, and maintenance. Realtors can also do much in the field of housing education when contacted by buyers and sellers. Home economics classes and business courses in high school should cover housing. Federal Housing Administration pamphlets and industry information should be made available. Libraries should have educational material on housing.

Realtors and Rents

Benton County has 23 real estate firms. Most housing purchases and sales are handled through realtors. Real estate firms are controlled by strict Oregon laws which regulate and audit their transactions. Realtors must be licensed, and to obtain a license they are required to study and pass state examinations. Banks, lending agencies, attorneys, accountants, contractors, and individuals can also explain some of the legalities involved in real estate transactions.

Rents in Corvallis are higher than in surrounding areas. Even so, amounts asked for newer or well-kept single family dwellings are usually only enough to cover taxes, mortgage payments, repairs, etc. People who are not prepared to pay this much money for a rental sometimes unwillingly turn to purchasing a home. Multiple dwellings command what the traffic will bear. This is caused primarily by the volume of

students residing here. There are not enough single family dwellings for rent in Corvallis or elsewhere in the county. Rental deposits protect the landlord and renter, and it is common for the first and last months' rents to be paid in advance.

RECOMMENDATIONS

.....Owners of rentals and those planning this type of construction should keep the single-family dwelling shortage in mind. Available rental information for new residents, before or upon their arrival, concerning all aspects of the housing situation in Benton County would be beneficial. When rental deposits are made, a prepared form stating the conditions of deposit including obligations of parties concerned should be used.

Senior Citizen Housing

An estimated 7.4 percent of the county population is over 65. Senior citizens live in all parts of the county. The housing facilities the elderly occupy vary considerably in size, age, and appearance. For the most part, they have satisfactory living quarters comparable to other ages and classes of people. A considerable number of senior citizens live alone. The greatest housing problems senior citizens have today are inflation, housing maintenance, and taxes. They do have certain property tax and income tax exemptions offsetting living and housing expenses to some extent.

RECOMMENDATIONS

.....For incapacitated senior citizens, more multiple housing should be made available at reasonable costs. Mobile home and hotel living offer some other solutions for senior citizen housing.

Committee Members

A.R. Root chairman
S.A. Jackson, secretary
Mrs. Alan Hendrix
Mrs. Lloyd Westcott
Mrs. Ron Modrell
Mrs. C.L. Anderson
Sam Crocker
Mrs. John Fryer
David Seitzinger
William Foster
Allen Dapp

Health Committee Report

Medical Assistance

Benton County has one hospital, the Good Samaritan in Corvallis. In May 1968, the 154 available beds were assigned to the following categories: pediatrics, 8 (58%); obstetrics, 20 (45%); and others, 126 (88%). Services include general, orthopedic, x-ray, clinical laboratory, emergency room (including poison control center), and extended care.

The county has 52 physicians and medical specialists and 30 dentists.

Five nursing homes handle long-term cases, and nine visiting home nurses with the Benton County Health Department provide aid to families with various medical and educational needs. Oregon Department of Health nutrition consultants work with county public health nurses on special diet needs. One of the physical therapists at the Good Samaritan Hospital serves as consultant to the health department. No dental hygienist of clinic is associated with the department.

PERSONNEL OF THE COUNTY PUBLIC HEALTH DEPARTMENT

The public health section has 1 health officer, 9 public health nurses, 3 sanitarians (1 assigned to OSU), and 4 secretaries.

The mental health section consists of 1 psychologist, 2 psychiatric social workers, 1 1/2 secretaries, and 2 days a week psychiatric service.

SPEECH THERAPY

Monmouth accepts referrals for speech and hearing problems for both diagnosis and training. District 509J conducts this service for students, as do the county school districts. The State Board of Health offers audiometric testing to all school children in Benton County.

Preventive Measures

Alcohol . Since Alcoholics Anonymous is not represented in Benton County, those seeking treatment go to Albany. The health department receives many inquiries from people wanting treatment. They are referred to the Albany program.

The county health office indicated that many automobile accident fatality cases have sufficient blood alcohol to be a contributing factor.

Food . A sample survey of public schools in Corvallis revealed the following food patterns in elementary, junior high, and high schools.

Boys

| Schools | Elementary | | Junior High | High School |
|---|-----------------------|-----------------------|-------------|--------------|
| | School A 3 Classes | School B 2 Classes | | |
| Date | Mar. 27-28 | Mar. 29 | Mar. 27-29 | Mar. 29 |
| Boys answering | 25 | 22 | 27 | 35 |
| Boys eating breakfast | 23 (92%) | 22 (100%) | 23 (85%) | 30 (86%) |
| Boys eating lunch | 25 (100%) | 21 (95%) | 21 (78%) | 24 (68 1/2%) |
| Tray | 56% | 68% | 63% | 25-3/4% |
| Sack lunch | 44% | 18% | 15% | 14% |
| Home | | 9% | | 5-3/4% |
| A la carte | | | | 8-1/2% |
| Snack bar | | | | 17% |
| Drive - in | | | | 3% |
| Other (candy, ice cream, soda, etc.) | | | | 11-1/2% |

Girls

| | | | | |
|---|-----------|-----------|--------------|----------|
| Girls answering | 20 | 21 | 40 | 43 |
| Girls eating breakfast | 19 (95%) | 20 (95%) | 32 (80%) | 35 (81%) |
| Girls eating lunch | 20 (100%) | 21 (100%) | 29 (72-1/2%) | 33 (77%) |
| tray | 75% | 52% | 55% | 25-1/2% |
| Sack lunch | 25% | 19% | 17-1/2% | 4-1/2% |
| Home | | 28-1/2% | | 2% |
| A la carte | | | | 21% |
| Snack bar | | | | 25-1/2% |
| Drive - in | | | | - - - - |
| Other (candy, ice cream, soda, etc.) | | | | 37% |

There are 771 persons currently certified as eligible to receive foods through the Abundant Food Program.

Teeth . Under the direction of Dr. David Witter, member of the Oregon State Board of Health, Portland, Oregon, and local dentists, there was a complete examination of all 3rd, 4th, and 5th grade children in Benton County schools early in the fall of 1968. It had been nine years since such an examination has been conducted.

Corvallis and Philomath had fluoride added to the water 17 years ago.

The newly formed Corvallis Dental Clinic has some dental equipment donated by Dr. Snook, but there is no place for it to be installed. It will be for indigent children. The county health nurse assists dentists who have made a number of examinations regularly to aid youngsters with toothaches so they may go back to school.

Environment Health

Vehicles . In 1967 17 automobile accident deaths occurred in Benton County. A total of 1,339 accidents in 1966 resulted in 12 deaths and 618 injuries. From January 1, 1967, through December 31, 1967, 26,503 automobiles, buses, trucks, trailers, and motorcycles were registered in the county.

Driver education is conducted at the high school, the university, and Linn-Benton Community College. There is neither a compulsory automobile safety check nor a traffic safety school conducted for persons involved in traffic violations or arrests. The National Safety Council can provide such a program.

Public Services . Civil Defense at one time conducted a medical self-help program but had poor response.

The Red Cross offers a standard first aid course to interested individuals. There must be 10 in the class, which requires 10 hours of instruction. The City of Corvallis has had this training for city employees. Youth working with the summer park and recreation program take the course.

A new "Y" in Corvallis will offer physical fitness facilities for youth and adults. The public school district offers some adult night physical fitness classes for men and women.

Restaurants . There are 67 public restaurants in Benton County, of which 58 are Grade A, 5 Grade B, and 4 ungraded. The sanitation division of the public health department inspects and grades these restaurants twice a year.

Home Accidents . Accidents in the home kill more than 7,000 American youngsters each year, and over 30,000 more suffer permanent injuries. Nearly 12,000 Americans were killed in home falls last year and many more suffered

disabling injuries. A total of 6,800 died last year as a result of home fires and related injuries, and 2,500 died at home from suffocation, choking, and smothering. The common home poisons, medicines, household cleaners, and carbon monoxide killed 2,800 Americans in 1967. Guns in the home (many of them unloaded) killed 1,500 Americans last year. Many Benton County residents are victims of home accidents each year.

Venereal Diseases . As the table shows, very few cases of syphilis were reported in 1958-1965 in Benton County. Gonorrhea, though, shows a decided increase, with the figure very nearly doubling from 1966 to 1967. Of the communicable diseases tabulated for the year ending December, 1967, gonorrhea was fourth from the top, with 40 cases reported in Benton County. First was influenza - 830; then strep infection - 219; and rubella - 47.

Benton County Statistics (from Health Department Records)*

| Gonorrhea | | Syphilis |
|-----------|----|----------|
| 1958 | 6 | 1958 3 |
| 1965 | 16 | 1965 1 |
| 1966 | 19 | 1966 2 |
| 1967 | 40 | 1967 1 |

*There is better reporting at the present time.

Since the cure of syphilis and gonorrhea, if caught in the early stages, can be affected in a week to 10 days by use of antibiotics, it would seem important to trace all cases to their sources. An article in Good Housekeeping reports that less than 11 percent of these cases are reported to health departments as is legally required.

Treatment is available in Corvallis either through private physicians or through the health department. All records are confidential. Literature is available through the health department. Health classes in junior high do mention VD, and it is also covered in high school through family life and some PE classes. All persons in Oregon are required to have a test for syphilis before marriage, and all pregnant women are tested on admission to the hospital.

Hospital admissions are routinely given blood tests for syphilis. Perhaps if there is a deficiency of reported cases in Benton County, the private physicians could be approached about tightening up their statistics.

Sex Education . Dr. Quale, the superintendent of school district 509J, indicated that sex education is a part of the regular curriculum in Corvallis schools -- kindergarten through high school. However, a committee of teachers has been organized to study this area and make curriculum recommendations.

Drugs . At the time of this report there does not seem to be any concrete evidence of drug usage at the junior high and senior high school level. There is talk of drugs and possibly "experimentation". Some of the talk could be boasting to get attention.

There is a definite increase of drug usage at the city level. There is knowledge of the use of drugs at OSU, but at the time of this report the problem is considered minor.

This subject is not static but changes with different times and situations. For example, although the use of hallucinatory drugs such as LSD is declining, there is an increase in the use of the amphetamine drugs. Officials are concerned that there is communication and intermingling between college students and high school students, resulting in the sale of drugs from college users to high school students.

Marijuana can be obtained in Benton County. Drug traffic into Corvallis has been definitely traced to a person from Albany and a person from Seattle. Other logical areas of supply are Portland and California. Corvallis students have been partially protected for two reasons: The size and urbanization of Corvallis prevents it from having as many social problems as a larger city; and Benton County is fairly isolated and not subject to heavy traffic or a large number of transients.

News media is not helping the situation. Newspapers, magazines, and television give the impression that "everyone does it." This encourages teenagers to feel free to experiment and not be bothered by any stigma or barrier in regard to public opinion or social acceptance. The responsible people of the community are also failing their duty in this same area. An example of this can be found in the Corvallis Gazette Times "Readertorials." A minority of the people have written letters in defense of marijuana and have minimized its danger. Knowledgeable people in the community should write articles explaining the dangers connected with marijuana and its far-reaching consequences, thus trying to undo some of the damage done by the minority. It is a known fact that chronic users of marijuana will usually graduate to heroin, morphine, or the hallucinatory drugs to get greater "kicks."

County Health Services

The Benton County Health Department serves the residents in many very important areas. The wide variety of services performed by staff members is not generally known.

THE BOARD OF HEALTH

The Board of Health consists of one member of the County Board of Commissioners, the mayor of Corvallis, a member of the Intermediate Education District, a physician, a dentist, and two laymen. The board administers and enforces the health and sanitation laws of the state. The board may conduct any activities for the preservation of health or prevention of disease within the county that it may deem necessary. The health officer is responsible to the Board of Health. He is the administrator of the program and is as well the medical investigator for the county and by law is the registrar of vital statistics.

From an operational standpoint the department is divided into four divisions:

Secretarial Division

The secretarial division is in charge of handling the records and reports. The secretary to the health officer is the deputy registrar and as such handles vital statistics. One secretary is assigned to the sanitarians and two to the nursing division.

The Division of Public Health Nursing

The public health nursing involves an entire community with many services interwoven to achieve a comprehensive family health program. Nine nurses are employed.

School Hygiene

The school hygiene program provides the following services: regularly scheduled weekly visits by nurses; teacher-nurse conferences to discuss the physical and mental health of each student and initial follow-up plans; and home visits to follow up any suspected or known health-related conditions, including mental health, crippling and communicable diseases, nutritional problems, and retardation.

A nurse is assigned to work with the community, the school, the home, and physicians and to coordinate community resources when needed. A nurse is also available for counseling with students and their parents. She also screens suspected communicable diseases or acute conditions when they are referred to her for action. The health department screens children after they have been absent for five or more days to determine if they are able to return to school. An annual hearing test is conducted by the State Board of Health for pupils in kindergarten and the 1st, 3rd, and 5th grades. Hearing and vision problems are referred to the appropriate specialists.

Home Health Nursing

Nursing care at home is not limited to Medicare patients. Home visits are made on referral by physicians. Follow-up, part-time nursing is provided for those recently discharged from hospitals. Home health aides provide Medicare patients with such services as bedside care, bathing, bed making, some food preparation, and light laundry.

General Public Health Nursing

Nursing services related to the general public include following up on tubercular patients after they are discharged from hospitals and investigating patient contacts. The health department can supply free drugs, and it conducts quarterly tuberculosis clinics.

Home visits are made to discharged mental patients for supportive treatment, to check on medication, and to keep channels open between hospitals and patients. Public health nurses work closely with the mental health division in performing these services.

When needed, general health supervision and health education are also a part of the general public health nursing program.

Prenatal Classes

The Benton County Health Department conducts one prenatal class each quarter.

The Division of Mental Health

The mental health division supervises cases referred by physicians, county public health nurses, and others or reported by the individuals themselves. Mental health staff members are involved in many activities including consultation and treatment of emotional problems of children; marriage counseling; follow-up of discharged mental patients and consultation with public health nurses concerning the supervision of these patients; consultation on adult emotional problems and treatment when indicated; and assistance to families of retarded children.

The Division of Sanitation

The sanitation division is responsible for inspection and supervision in the following areas:

Food Services

Restaurant inspection includes proper practices in handling food, cleanliness, and the examination of equipment.

Tourist and Care Facilities

Motels, trailer parks, and hotels are inspected for adequate sanitary facilities. Nursinghomes, day-care nurseries, and foster homes are inspected in order to control sanitary conditions involving food, water, and sewage and garbage disposal.

General Sanitation

Supervision of the county sanitation ordinance includes the inspection of subsurface sewage disposal systems, checking water supplies and garbage disposal facilities, and the investigation of nuisances.

Mosquito Control

Mosquito breeding places must be checked and treated and routine spraying is necessary.

OSU Supervision

One sanitarian is assigned to Oregon State University to supervise sanitation in living units on and off campus.

PROBLEMS AND CONCERNS

This supervision includes food facilities, garbage disposal, and sleeping accommodations.

Medical

.....The physical facilities of the county health department are very crowded for the existing staff and program, with no room for expansion.

.....There is no local source of special diet-meal planning consultation for persons on special diets. Doctors provide assistance, but homemakers need help in obtaining recipes and planning menus.

.....More people should know how to administer mouth-to-mouth resuscitation and how to control hemorrhaging.

.....Families need to be made aware of services which are available, such as the poison control center in the hospital emergency room and in Portland.

Environmental Health

.....There is no traffic safety school for persons involved in traffic violations or arrests.

.....A periodical driver reexamination program for adults and youth is needed.

.....There is no compulsory automobile safety check program.

.....Families do not carry well-equipped first aid kits in their cars.

.....Home accidents cause many injuries, a great number through the carelessness of individuals.

.....Guns in homes cause accidental injuries and deaths.

.....Drug use and abuse, while not a large problem in Benton County, is on the increase.

.....Venereal disease, especially gonorrhea, is on the increase

Preventive

.....Alcoholics Anonymous or an alcoholism treatment center is needed in Benton County.

.....Junior and senior high boys and girls have poor eating habits. Many teenage girls are overweight.

.....The surplus food program is not available to inform older people living with sons or daughters.

.....The health department does not have room for a dental clinic or hygienist in the present building.

.....A planned parenthood clinic is not included in the 1968-69 budget of the health department.

.....Many parents are not prepared to cope with providing information on personal growth and sexual development for their children.

HEALTH COMMITTEE RECOMMENDATIONS

Medical

.....The Benton County Health Department needs the following: a larger building to allow program expansion; more health aides; an increase in personnel (partly as a result of Medicare); and the expansion of the mental health clinic

staff and building.

....The public library should establish an inventory of books and other special references for planning diet meals. Also, a dietician should be available in the county for assistance with special diets.

....The health department's Resuscitation should be used by such groups as PTA's, Boy Scouts, 4-H, Home Extension, etc., to further public education in mouth-to-mouth resuscitation. Youth and adults should be encouraged to take part in first aid courses emphasizing mouth-to-mouth resuscitation and control of bleeding.

Environmental Health

In the field of environmental health, the committee recommends that:

....The City of Corvallis and Benton County study the possibility of establishing a traffic safety school for traffic violators.

....Cities and the county cooperate on setting up a driver reexamination program.

....The possibility of compulsory automobile safety check program be studied.

....All fourth graders equip a first aid kit for their family car.

....Information about the poison control center in the hospital and about other county health programs be included in a pamphlet to be distributed by Chamber of Commerce and through Good Neighbor greeters.

....Home and highway safety slogans and reminders be brought to the attention of the public through radio promotions.

....Gun safety be discussed by men of the community at club meetings, in classrooms, with scouts and 4-H youth, at the Isaak Walton League, the Elks Club, and in any suitable environment.

....Improved VD reporting to the County Health Department be encouraged. It is especially important to trace and treat contacts. Further education on the physical and social aspects of VD is also urged.

....A building and plumbing inspector in connection with new zoning and planning commission be employed.

Preventive

The committee recommends that:

....AA be established in Benton County or more active cooperation with the Linn County chapter be urged. AA should be consulted about this recommendation.

....More nutrition and physical fitness education be developed in youth programs. A camp program for overweight teenagers would be of value. The program would be coordinated through the community agencies working with youth -- 4-H, scouts, YMCA, and others. The social and physical needs of youth should be emphasized in the camp program.

....The Abundant Foods program be continued and the Extension Service expand its educational program on the use of the foods.

....A dental health program consist of regular dental examinations ever 2-3 years, at least, and that they be conducted by local dentists and the State Board of Health officer. An active committee of dentists from the local society

should be appointed to see that the dental health program is equal to that of any county in Oregon. The Corvallis Dental Indigent Clinic should be on the same basis as the Benton County Foundation so that it can receive money, gifts, etc., and the donor be able to deduct his donation from his income taxes, both federal and state. It is highly recommended that a dental hygienist be appointed to the Benton County Health Department. The appointment should be made by the county health officer and a committee from local dental society. The 2,748 children in 3d, 4th, and 5th grades will have dental checks in the fall to make assessments to determine the need for a dental clinic.

....A school sex education program be supported.

....The drug situation be reevaluated periodically. The committee recommends that at junior high and senior high schools and colleges there be comprehensive drug education programs: (1) audio-visual material dealing with both physiological and psychological effects of drugs, (2) lectures and panel discussions led by professional people -- doctors, pharmacologists, psychiatrists, and other persons adequately trained in the field of drugs and its side effects, and (3) more concerned and factual reporting of drug usage by the news media, and a concern and active participation by the citizens of Benton County.

....A more comprehensive nutrition program for youth and adults instituted. The Extension Service has traditionally offered nutrition education and continues to do so. However, there is a need for more education in nutrition for young people as well as for families.

Committee Members

Dr. E.G. Quisenberry, chairman
Mrs. Ralston Smith
Dr. Peter Rozendal
Mrs. Donald Hector
Mrs. Francis Hurt
Mrs. Herman Abraham
Mrs. Richard Baker
Mrs. D.J. Mullett



Correspondence extension educational programs enable homemakers and others to learn at home.

Family Stability Committee Report

Although individual ideas differ about what is meant by a stable family, we could define "family stability" in terms of the ongoing growth of personality and character experienced by individuals within a family setting -- growth making possible emotional satisfaction, intellectual stimulation, and financial cooperation within a mutually caring and responsible relationship.

We mean the development of a family "culture" in which the working values reflect both an understanding of the family's heritage and past traditions and of the realities of the world today -- values open to question or revision as times change and individuals mature in different ways. Perhaps the stable family is the idealization toward which each family strives: to be able to be oneself within a family group: accepted as worthwhile and unique; and accepting others in the family in this same way; deserving of one's respect, consideration, loyalty, and help.

Why should the developing of a stable family life be important to a community? As American family structures change, for instance, most of today's families no longer rely

on the services and support of relatives living in the home; fresh demands are made upon the community to promote responsible and stimulating family life through appropriate programs and services. At the same time, the community needs to become more responsive to those families with special handicaps or a lack of personal resources which may prevent them from utilizing and enjoying those programs and services already existing.

We know that the education a child receives during his first few years in the home crucially influences his human development. He learns to deal, in his own way, and on close emotional terms, with others in his family. He develops a sense of his own worth, probably in proportion to the sense of worth his parents have for themselves and for him. And he begins to reach out to people and places beyond his own family, becoming part of a larger community to which he is expected to contribute some measure of himself. Of such, then, are communities made: men, women, and children whose first-hand knowledge of cooperative experience has been within their own family setting.

Today's Family in Benton County

The committee explored some of the conditions and resources which appear to foster a satisfying family life in Benton County. The members were concerned with those factors which help to create a climate in which a marriage may grow and change productively; the kinds of support and services necessary at different periods in a family's experience; the cultural and recreational resources available to family members during their leisure time; and the educational opportunities available to family members in different areas of Benton County.

Children today are growing up within changing urban

and rural living conditions and shifting family patterns. Traditional value systems are being openly reexamined; expectations and evaluations of marriage and family life are continually and publicly discussed.

MARRIAGE AND DIVORCE

A look at marriage and divorce statistics in Benton County for 1967 will give us a general view of our present social trends.

Marriage license applications during the first six months of 1967 were distributed as follows:

| | Under 18 | 19-21 | 22-24 | 25-32 | 33-40 | Older |
|-----------------|----------|-------|-------|-------|-------|-------|
| Men | 11 | 86 | 70 | 36 | 7 | 7 |
| Women | 12 | 101 | 36 | 10 | 1 | 5 |

Nine of the girls were under 18 were 17 years old, two were 16, and one was 15.

There were 107 divorces recorded in 1967, with the following distribution:

| Years married. . . . | 1-5 Years | 5-10 Years | 10-15 Years | 15-20 Years | 20-25 Years | Age over 43 No. children |
|-------------------------|--------------|---------------|----------------|----------------|----------------|-----------------------------|
| Divorces | 15 | 17 | 13 | 4 | 6 | 15 |
| Children affected . . . | 38 | 31 | 26 | 10 | 14 | 0 |
| Age of children. . . . | 8 mo.-3-1/2 | 3-1/2-10 | 2-12 | 9-17 | 11-17 | |

There were two divorces in the 16-17 age group; 38 divorces in the 18-24 age group; 31 divorces in the 25-32 age group; 11 divorces in the 33-40 age group; 16 divorces in the 41-47 age group; 8 divorces in the 48 and over age group.

It appears that most marriages occur between the years 19 and 24. The majority of divorces occur in the first five years of marriage and generally involve young people who have already had children. Seeing the large number of young children affected by divorce, the committee believes that our community should consider the following needs as urgent; a more realistic education about marriage and family life during a child's formative school years; a sound education for young persons about family planning methods; and an obligatory process of conciliation for marriage partners considering a separation or divorce.

It is likely that today's young people will put a higher value on the quality of their marriage and family relationships as more opportunities for continuing family-life education become open to them. In the future more counseling will be available to men and women; more couples will use such services. As our society develops new concepts about the relationship between the sexes, and as persons experience less fear of unwanted pregnancies, men and women will probably be less apt to drift or be pressed into marriage. A more permanent relationship involving the upbringing of children can be deferred until it is truly desired and understood by both parties. Single people will in the future be more likely to adopt children; older women who have children out of wedlock will be more likely to keep them.

ADOLESCENCE

One of today's pressing needs is to make adolescence a more meaningful period in the lives of young people. The

growing child is given diverse experience and an awareness of differing cultural values through travel and the use of mass media. How can the family and community best utilize a young person's fresh view of the world and his drive for independent action? Parents might explore to their entire family's advantage such questions as how to cultivate children's unique human qualities, how to develop mutually respecting standards for family life, how to prepare children for a challenging place in America's multiracial society, and how to accept and channel youthful criticism of apparent social flaws.

NEEDS OF BENTON COUNTY FAMILIES

To understand better different outlooks and needs among Benton County families, a questionnaire developed by this committee was distributed to more than 100 Benton County families, in different areas of the county.

The results of this survey point up the desire among family members to see this county develop:

- Improved recreational facilities among all age groups; for example: water recreation, ice skating, horseback riding and hiking trails, biking paths, and school gymnasium programs for weekend family programs.
- More adult education programs in outlying county areas.
- Better education of the public about ways of obtaining information and assistance regarding legal matters, housing, child care, finance, and home management.
- Long-range plans regarding urban and rural land use and pollution controls.
- More public information about family housing.
- Increased sensitivity among "middle class" families, community agencies, and professions to needs and problems of low-income and minority families.

Counseling Services for Benton County Families

The State Employment Service counsels individuals looking for work or educational opportunities through the Manpower Development and Training Act, Department of Vocational Rehabilitation, New Careers, or Job Corps. About 25 percent of those counseled are placed on jobs; about 50 percent cannot benefit because of lack of training or of jobs.

The Corvallis Crisis Service is sponsored by the Benton County Mental Health Association and staffed by volunteers who respond to telephone calls for help by persons contemplating or threatening suicide or undergoing any kind of emotional crisis.

The County Juvenile Department's director and two counselors try to help troubled children and youth before rather than after they appear in court. Mentally or emotionally disturbed juveniles are referred to the Mental Health Department or the state hospital. Follow-up service by public health nurses may be requested. Referrals come largely from law enforcement sources. Cases involving neglect or abuse are now referred to the Welfare Department. The department staff works with families in an effort to solve problems often caused by a lack of communication within

the family. Children who must be removed from their homes are placed in shelter homes for several days until other action is determined. Youths made wards of the court are, if possible, left in their own homes under department supervision. Otherwise, they are placed in foster homes, youth group homes such as Hawthorne House (Corvallis), or Perry House (Portland), or in state correctional institutions. Families willing to provide shelter or foster homes are in critical demand in Benton County. It is much more difficult to find foster homes for teenagers than for young children. All of the professional people associated with juvenile work with whom we talked urge this community to become more aware of the needs of troubled young people and to provide them with more humane care facilities instead of forcing them, through public indifference or apathy, to enter "correctional" institutions, which tend to perpetuate patterns of delinquency and social hostility. Among the most frequent charges brought against 13-18 year olds appearing in court during the last several years in Benton County were the following: shoplifting and other larcenies, violation of curfew, vandalism, running away, truancy, and possession of alcohol. Traffic cases are no

longer recorded with the juvenile department.

The Benton County Court is now considering plans for establishment of a district conciliation court to counsel both parties before they are permitted to file in an uncontested divorce suit. There is both a lack of funds beyond the local level and a lack of community interest in the need for such a conciliation process. At present, the County Health and Welfare Department do much of the referring court counseling do take advantage of the service.

The Benton County Mental Health Clinic, serviced by a clinical psychologist, psychiatric social workers, and psychiatrists (part-time), sees cases usually growing out of family-related problems. It provides indirect service to the schools, welfare department, and other groups. Such referrals are growing steadily, as are self-referrals. The staff's need to expand to meet community needs is hindered by the lack of funds available for its program.

Public schools utilize the services of the Mental Health Clinic. There is also a counseling department within the Corvallis School District. An evaluation center at Oregon State College of Education at Monmouth and a speech and hearing center at Eugene may be utilized by Benton County families.

Services for Needs of Family Members

Day-care centers in the county must meet minimum standards of health published by the State Board of Health. Day-care facilities are not yet regulated in other ways, however, such as educational requirements for the nursery staff. Most commercial nurseries have a similar program and fee schedule. Recently the Community Day-Care Center was established in Corvallis. It is planned and operated for low income families and ADC mothers and serves children from 2-C years of age. Its program is managed by a paid director, volunteers, and a board of directors, and is supervised by the OSU Family Life Department.

Senior citizens have a wide choice of social organizations designed for retired persons. Unfortunately there is no centrally located meeting place for their programs. Night classes are available through continuing education programs and the Linn-Benton Community College and OSU. A driver training program is available. Free admission is granted "senior citizens" at plays and at athletic events at Corvallis High School. They may take advantage of many cultural opportunities and community organizations; however, transportation to events is a problem for the elderly. Often they lack the strength or the financial means to volunteer their time and resources to program planning; they would benefit from volunteer assistance.

The Corvallis Public Library is open to all Benton County residents in an attractive central building and through station libraries throughout the county. Reference assistance is provided. Friends of the Library sponsors monthly book reviews in addition to other library programs such as shut-in service to invalids and children's story times.

The Oregon State Employment Service administers a federally supported adult training program under the Manpower Development and Training Act. It is open to unemployed and underemployed Oregonians below prescribed income levels. Group instruction is handled by various approved groups such as Salem Vocational Technical Institute

The Oregon State University Counseling Service provides educational and vocational counseling: personal, premarital, and marriage counseling. The center is open to any OSU student or faculty member, prospective student, or spouse of student or faculty member. Probably 5 percent of the student body uses this service. The Family Life Department on campus also provides informal counseling to students. There is no psychiatrist presently on staff of the Student Health Service.

The Linn-Benton Community College Counseling Center provides comprehensive vocational, educational, and personal counseling for students. Almost all students make use of the counseling service for one or more of these needs. Group counseling is conducted for students needing personal counseling service; however, those with severe needs are directed to the County Mental Health Clinic.

Campus and local ministers provide counseling although most is done by ministers of local churches. The problem of personal identity probably causes the most concern. Campus ministers hope that more married students seeking help with personal problems will take advantage of counseling resources.

and Linn-Benton Community College. Individual instruction is available through established business channels. Through federal programs new educational programs are continually being developed.

Linn-Benton Community College, newly organized, offers numerous courses many for credit, open to qualified adults for a fee.

The Corvallis Art Center offers classes for children and adults in the arts. It also holds monthly art exhibits and programs in the performing arts which are free of charge.

The Cooperative Extension Service develops home extension units, workshops, correspondence courses, and classes for women in the field of home management and family life. Men's programs relate agricultural programs to the needs of business and industry. A wide range of 4-H programs for youth is offered. USDA fact sheets and bulletins are available to the public.

The Benton County Health Department conducts prenatal classes for parents. Educational work is part of the total health program. Little is presently accomplished in the area of a community family planning program because of shortage of funds.

The Benton County Welfare Department counsels and works with individuals seeking financial rehabilitation and job counseling. Case workers work closely with ADC mothers, elderly, handicapped and other individuals requiring physical, financial, or emotional rehabilitation. They direct people to community resources which attempt to fulfill specific needs.

The Benton Association for Retarded Children conducts classes for preschool and school-aged children, a day-care nursery, and other programs to assist retarded children and their families.

Oregon State University offers excellent opportunities to continue academic work, obtain advanced degrees, and to enjoy the cultural and social experiences made possible by one's involvement in an academic community.

Programs Dealing with Family Life Education

Educational programs relating specifically to the needs and challenges of family life are carried on in part by the public schools, the County Public Health Department, the Cooperative Extension Service, P.T.A. groups, the medical profession, local churches, the Benton County Family YMCA, Oregon State University, and various adult education classes.

RECOMMENDATIONS

The committee makes the following recommendations for improving conditions which affect family life in Benton County:

Years of Beginning and Rearing a Family

..... Establish a community family life council to act as a coordinating board for developing community programs that relate to the needs of modern families.

..... Offer a series of premarital courses through the Benton County Mental Health Clinic and Health Department, utilizing family-oriented resources of the community.

..... Develop the role of public health in a family planning center and encourage the center's use by various community services. More education on all levels of community life about population growth and its implications for the near future should be encouraged. Referral of newly married couples could be made by the county clerk's office and/or physicians and clergymen. PTA, the Home Extension Service, and the County Medical Society could develop joint public programs about family planning.

..... Establish a conciliation court to work with families in conflict. The court could also coordinate family-oriented agencies.

..... Expand counseling services on campus for young couples in early years of marriage. The Mental Health Clinic and the Health Department or a family life council might develop a series of night classes relating to problems and challenges of early years of marriage, perhaps including a correspondence course on this topic.

..... Extend community resources into rural areas and isolated towns where few educational activities are available. New approaches should be found to help people solve problems in areas of public health, employment, job retraining, family life, adult education, and library use. Empty school classrooms could be used during evening hours for adult education and recreation in rural areas.

..... Improve radio, TV, and newspaper publicity about community facilities and services, especially in areas of job training, personal counseling, day care, crisis service, and mental health.

..... Encourage the Mental Health Clinic to find creative ways of working in cooperation with schools, churches, and other family service groups.

..... Develop a homemaker aide program through the County Extension Service and make homemaker aides available to less advantaged homemakers.

..... Help legal, medical, and teaching professions become more sensitive to needs of people outside the range of "mid-

dle class" benefits and values and of different minority groups. Rapport and trust are established as immediate situations confront people. In this area, we now realize, there is a wide communication gap between "have" and "have-not" families.

..... Plan county recreational facilities and commercial facilities which reflect the needs of modern families to explore their physical environment and make stimulating use of leisure time. (Examples appropriate to Benton County: biking paths, hiking trails, improved recreational use of rivers and lakes, an ice-skating rink, more public swimming facilities, better controls for air and water pollution, and long-range planning for urban and rural land use.) The formation of community volunteer "work parties" to assist in developing recreational resources should be considered.

..... House family-oriented agencies under one roof.

..... Improve parents' understanding of needs of babies and young children. Help them develop standards by which to evaluate nursery schools and day-care facilities before enrolling preschool children or hiring full-time babysitters.

..... Help families (through school and other family-related groups) become aware of their responsibilities for evaluating and influencing TV programming and for guiding children to allocate TV time.

..... Create and train a pool of community-service volunteers, working in such areas as day-care tutoring, volunteer teacher-aide work, counseling, youth programs, aid to the elderly and to homemakers.

..... Encourage the public library to seek creative approaches in reaching the rural population with children's reading and film programs. Reading should be emphasized as a family leisure-time activity. Radio and newspapers should be used to review current books.

..... Develop more shelter homes in the county where children may stay pending court action.

..... Strengthen parent-teacher groups on the community level and reinforce their ties with other interested community groups. A PTA pamphlet on family-community resources which could be distributed to families of children new to the school system should be issued.

..... Strengthen and implement the mental health program within the public school curriculum, particularly in early school years, where it is often neglected.

..... Provide teachers and other adults working with children and young people frequent opportunities for continuing education, particularly in such fields as sex education and modern problems. School textbooks and resources should be examined to determine whether they reflect understanding of the realities of modern society, with its culturally rich background of races, religions, and nationalities.

Later Family and Adult Years

..... Open channels of communication, in a private, informal setting, between troubled or "neglected" young persons and understanding mature adults. Young people need adults who are open and warm and accept different viewpoints.

..... Create more foster homes for teenagers.

-Develop public interest in creating private homes, such as Hawthorne House, and other private facilities where youth can receive training and counseling over a period of time rather than having to enter a state institution.
-Establish through the Mental Health Clinic a facility to serve people with questions or problems about drug use. This center should be staffed by knowledgeable and sensitive professionals (including university faculty) willing to be involved in community education.
-Provide more educational opportunities for young people and parents to learn about stages and symptoms of venereal disease.
-Develop a daily newspaper section for and by youth, including a place for exchange of opinions and a listing of weekly social and intellectual activities in areas outside of Corvallis.
-Improve job training programs and employment opportunities for teenagers.
-Encourage the public library to develop programs particularly in isolated rural areas, to interest older youth.
-Create community aide positions for interested young people. Involve teenagers more effectively in community planning.
-Consider establishing a centrally located meeting place for social and recreational purposes for older people.
-Develop public recreational facilities specifically for

- older people (for example: shuffle board, bowling greens).
-Develop community assistance to older people in fields of program planning and transportation (perhaps provided by interested young people). Make special school and community events available on a limited fee or no fee basis.
-Develop a community scholarship program for older persons who are interested in the activities of the art center, the YMCA, and adult education classes.
-Help lawyers, doctors, and teachers to become more sensitive to the needs of older people and aware of their financial problems.
-Develop low-cost homes for people not living in their own homes but not requiring nursing-home care.
-Initiate a community service facility in the downtown core area to meet personal and social needs of isolated elderly persons living outside the care of a family.

Committee Members

Mrs. John Berry, chairman
 Mrs. Frank Morris, secretary
 Mrs. Herman Luther
 Martin Baker
 Mr. and Mrs. Henry Clay
 Mrs. Carl Schelp
 Mr. and Mrs. Paul Vroman

Youth Committee Report

Education

SCHOOL SYSTEMS

Alsea . The school system includes both high school and grade school, with a daily attendance of approximately 250, of which 180 are grade-school and 70 high-school students. This school has experienced little gain in enrollment in the last three years and is contemplating no immediate building program.

Monroe . Monroe operates under a union high-school program with an attendance of 187 to 200 pupils and an anticipated increase of 7 to 8 percent for 1969. Plans for the fall of 1969 include a new gym with a basement for shop, music room, library, and additional class rooms. There are 178 students in the eight grades in the elementary system. Enrollment increased by about 30 in 1968, and increases will continue by about 19 to 20 each year.

North Albany . There are five schools in the North Albany area. Enrollment is as follows: 133 North Albany; 145 Fairmount; 92 Fir Grove; and 21 Oak Grove. This includes only the first six grades. There are 498 attending the North Albany Junior High School, making a total of slightly over 1,000 attending the five schools. No immediate figures were available as to projected increase in attendance. Building programs contemplated three new classrooms for Fairmount and six at a later date. Fir Grove is planning three additional classrooms and Oak Grove two new rooms and a new library.

Philomath . Philomath schools have shown no increase in enrollment over the past three years, and no future increase is anticipated. The greatest need is for kindergarten facilities necessitating two or three classrooms. Also needed is additional space for a chemistry, physics, and general science complex. Future plans are such that both high school and grade school can be increased where necessary.

St. Mary's School. St. Mary's in Corvallis is conducting a new building program that will involve four classrooms, making eight, which will allow the school to divide the school program and avoid double grades in the classrooms. The new school will also have a multipurpose room. Enrollment at the present time is 166, and it is anticipated that it may reach 200 in the next few years.

Zion Lutheran School. Zion Lutheran in Corvallis is a three-room school involving all eight grades with 48 students enrolled. It is expected that there will be 60 in the fall of 1968. It is anticipated that this enrollment will remain between 60 and 70 in the next five years, and facilities are such that a fourth room can be added if and when the enrollment reaches 90.

Corvallis . The Corvallis school system is a unified system covering grades kindergarten through 12 under a single board of directors. Following is a chart which shows school population trends dating back to 1957 and then projected on through to 1977, on the basis of a projection fig-

ure suggested to the school district by the firm of Langford and Stewart, city and regional planners. This firm of planners has estimated that our normal yearly average increase will be approximately 4.8 percent annually.

| | 1957 | 1967 | 1977 |
|-----------------|------------|---------------|---------------|
| K-6 | 2, 866 | 4, 482 | 7, 000 |
| 7-9 | 890 | 1, 813 | 2, 845 |
| 10-12 | <u>756</u> | <u>1, 781</u> | <u>2, 898</u> |
| Totals | 4, 512 | 8, 076 | 12, 743 |

District 509J currently enrolls approximately 70 percent of all the school age children in Benton County.

PRESENT SCHOOL PROGRAM

Kindergarten

Corvallis schools presently support a kindergarten program in all elementary school attendance areas. Kindergarten is conducted during a half day and is available to all patrons of the district. This portion of the school program is not a part of the regular state-supported program and is carried entirely by the Corvallis school district.

Grades 1-6

Corvallis elementary schools number 13, with one school in the process of being built, intended for operation in the fall of 1968. There are 204 teachers in these schools. Schools range in size from the smallest, with 112 youngsters and 4 1/2 teachers, to the largest, with 554 youngsters and 19 1/2 teachers. Our elementary system is built on the concept of the self-contained classroom, in which a teacher deals with the same group of youngsters for the entire day and covers most of the standard subjects. An exception to this practice is that in certain specialized areas, such as music and art, specialists are employed to work with the problems that individual youngsters might have, such as speech and reading. In Corvallis elementary schools, there are two classes for the educable mentally retarded youngsters and one class for students who have special problems with adjustment in the regular classroom. In addition to these special classes, Corvallis schools are making a beginning in the areas of school counseling and psychological services.

Junior High School—Grades 7-9

Corvallis junior high schools number three, with a school population ranging from 575 to approximately 700 youngsters per school. Our junior high schools make an attempt to provide advantages to youngsters both in the area of personal adjustment and also in increased specialization. Special classes that exist in Corvallis junior high schools of particular note are the class for the educable mentally retarded, and a program of vocational and educational guidance, particularly through a work-experience program.

Senior High School—Grades 10-12

The current high school student population is somewhat over 1,800 students, and there is a second senior high school currently in the planning stage, which will possibly be in operation by the fall of 1970. Special programs in Corvallis senior high school include an extended program aimed at vocational advisement and personal guidance; a class for the educable mentally retarded; and an expanding program of vocational education, such as work experience programs in which students are working part of the time on regular jobs and attend school part of the day receiving some instruction relating the two areas. Special vocational programs in auto mechanics, agriculture, carpentry, electronics, business occupations, and homemaking are also stressed.

Farm Home School

The Farm Home school is a school for junior high through senior high age level. It is financially supported by the state but administratively supervised by the Corvallis School district. Currently it functions as an agency to provide schooling for youngsters who attend the Farm Home institution. Attempts are currently being made to tie the Farm Home school operation more closely with the city schools to develop a better cooperative relationship between Corvallis senior high school, particularly, and the Farm Home school.

The Children's Farm Home is an institution for the treatment of adolescent boys and girls ages 12 through 18. This agency serves boys and girls from all over the state. The population of the Farm Home is approximately 50, with approximately 10 girls to 40 boys.

As a quasi-community the Farm Home is quite self-contained, having its own school, recreational area, and social patterns. The institution does depend on the communities of Corvallis and Albany for services and supplies.

In contrast to its historical beginnings in the 1920's, when children (often in families) stayed for several years, residents of the Children's Farm Home now stay for a relatively short period and then return to their families or foster or group homes.

The Farm Home school enrolls children from the Farm Home, children referred by the Corvallis school system, and a segment of the boys from Hawthorne Manor (see description of Hawthorne Manor). The Farm Home school is specialized, having 8 teachers for 56 students.

Hawthorne Manor

Hawthorne Manor is a group home in Corvallis serving the needs of three counties -- Benton, Linn, and Lincoln -- and the Farm Home. Hawthorne is a youth care center under the Corrections Division of the State Board of Control. Boys are placed in this community setting as an al-

ternative to commitment to MacLaren School for Boys. The philosophy of the community home is that each boy must use the community, its school, recreation, work, and leisure-time programs. Presently 6 attend Corvallis schools and 5 attend the Farm Home school, with 1 preparing to be involved with the Department of Vocational Rehabilitation.

Hawthorne Manor staff includes house parents, a cook, and part-time group care workers. The director of the manor serves in the areas of administration, case work and public relations. Hawthorne Manor is located at 320 N. 9th in Corvallis. The house was formerly a co-op used by college students.

Driver Education

Driver education is being taught in the high schools at Philomath, Monroe, Corvallis, and Albany, but not at Alsea. This course deals with the theory of driving and safety, requiring 30 hours of instruction. In the year 1967-68 at Corvallis high school 580 students were enrolled.

Driver training requires 6 hours of behind-the-wheel instruction. Four hundred students completed the course from 2 full-school-time and 12 summer instructors. Ninety percent of all CHS students complete both courses in their three years in high school.

It has been proven that graduates from these courses have lower accident rates and better driver ability; also auto insurance companies offer lower rates to these students.

The committee recommends that defensive driving courses be offered in the county to all drivers.

Counseling Center

There were 4 full-time counselors and 1 half-time worker with a work load of 425 students apiece at Corvallis High school in 1967-68. Their duties cover college, vocational, academic, and family counseling.

Retarded Children's Program

The Benton County Association for Retarded Children provides classes for the mentally retarded from 5 to 18 years of age. Also, there are classes for the educable retarded child from elementary through senior high school.

A day-care center for handicapped children, both mentally retarded and physically limited, is provided. The Open Door program is a portion of the program and is a sheltered workshop for both physically and mentally handicapped persons over 18. Open Door is used by the Division of Vocational Rehabilitation for evaluation and training and leads to job placement for some.

Activities of the retarded children's program include skating, a swimming program which is being sponsored through YMCA, an interdenominational Sunday school, and a day camp sponsored jointly by YMCA and BARC. (BARC is a United Fund agency.)

Youth Organizations

A study of youth organizations shows that the following national organizations are the more active offered in the county: Boy Scouts, Girl Scouts, Campfire, 4-H, YMCA, and those sponsored by fraternal groups such as the Masons, Oddfellows, etc.

Boy Scouts

There are 1,199 boys involved in units throughout Corvallis, Philomath, Monroe, and Alsea. These include Cubs, Webelos, Boy Scouts, and Explorer Scouts. The program starts in the third grade.

Girl Scouts

Activities of the troops are centered around the arts, home, and out-of-doors, with emphasis on service, citizenship, international friendships, and an ethical code based on The Girl Scout promise and laws.

The organization sponsors a day camp open to all girls in the community from 7 to 17 years of age; also, two resident camps, one in Benton County.

Camp Fire Girls

In this organization the emphasis is placed on the youth doing things on their own. Girls 7 through 18 years of age work with a volunteer leader. Those in grades 2 and 3 are Blue Birds, grades 4 to 6 are Camp Fire Girls, grades 7 and 8 are Junior Hi Camp Fire Girls, and grades 9th to 12 are Horizon Club girls. After high school the girls are eligible for junior leaders' programs.

Benton County 4-H Program

There are approximately 900 4-H members enrolled in the 4-H club program in Benton County under the guidance of 128 adult volunteer leaders and 53 junior leaders. Basic enrollments are in the areas of clothing, foods, knitting, and livestock. A greater emphasis has been noted in natural sciences and marketing studies the past year. The new TV program had over 300 members enrolled.

Annual activities of the 4-H program include the 4-H spring fair for home economics projects and the 4-H fall fair for livestock projects. Numerous tours and other educational activities are held throughout the year for 4-H members and leaders.

4-H work is available in every community in the county. Approximately 11 percent of eligible boys and girls are enrolled in the program. The greatest need involving the 4-H program is for more volunteer leaders, especially in the areas of forestry and the natural science projects.

YMCA

The YMCA programs are divided into four phases: (1) physical activities -- judo, fencing, swimming, (2) club programming, which includes Tri-Y, Hi-Y, and Indian Guides, (3) caravan camping -- for a two-week trip in the summer for junior and senior high girls and boys (there is also a summer day camp for the mentally retarded children), and (4) special-interest area activities -- offered to the junior and senior high boys and girls.

The YMCA plans to have facilities for their members to have use of a lounge, special game rooms, and an area for dancing.

The YMCA has organized clubs in Philomath and Monroe. A part of the YMCA is working with Y-Round Table on the Oregon State University campus where a student helps with school and social programs with younger boys and girls of the community and acts as their big brother or sister.

With the building of a new YMCA building in Corvallis, an organized swimming program is offered. Additional facilities to be constructed will offer further opportunities for youth activities.

Jobs Daughters, Rainbow, and DeMolay

These groups are nonsupported Masonic organizations; membership is more or less selective. Girls 13 to 20 years of age make up two Rainbow assemblies in Corvallis, with over 200 girls in each group. The one Jobs Daughter assembly is comparatively new in Corvallis. Membership in this organization is made up of girls who are directly related to members of the Mason Lodge. There is one DeMolay chapter, open to all boys, with 150 boys between the ages of 14 to 21 involved.

CORVALLIS PARKS AND RECREATION DEPARTMENT

The Corvallis Parks and Recreation Department is an operation of the City of Corvallis. The department has a cooperative working agreement with Corvallis School District 509J for the joint use of school facilities. The department had use of school facilities for recreational programs over 5,000 hours last year.

The department is currently working on agreements with the school district for joint acquisition and development of recreational sites. In such an arrangement, the city develops a park next to a city school. This has been done in two areas.

One of the duties of the parks division is to acquire, develop, and maintain parks and recreation areas in the city. To date, the maintenance division takes care of 273 acres of park land.

A year-around recreational program is underway: 39 activities are included at this time. The activities vary considerably with the biggest concentration of programs in the summer months. The programs will range from cultural arts to sports.

Finances limit the types of programs that can be operated, but each year a few new activities are added. The main weakness at present is the area of teenage activities. Although individual activities for the teens are provided, the real need is for a teen center or a community center. This would give the teenagers some place to go when they are not working or in school.

Also, a need that is becoming more prevalent is that of a golden age club facility. This facility would allow golden age clubs to have a place to meet.

Activities in the recreation program include: Fall and Winter -- children's folk dance class, teen folk dance class, adult folk dance class, adult square dance class, square dance night, round dance night, baton twirling class, basketball, men's physical fitness classes, women's physical fitness classes, punt-pass and kick, vacation open-gym program, kid's wrestling, Golden Age Club, and senior citizens. Spring and Summer -- playground program (seven locations), ballet, music, orchestra, drama, track and field, golf, weight lifting, baseball, softball (girls) softball (men), tennis, summer basketball, couples' volleyball, junior olympics, horseshoe tournament, round dance, swimming, and children's pet and costume parade.

It is the recommendation of this committee that families participate and use the Corvallis parks and recreation facilities as well as the county parks to their maximum.

It has been found that sports participation by youth serves several needs, from encouragement to confidence in themselves, whether to win or lose. The physical involvement and exhaustion many times is what youth needs in the growing stage when strength has to be channeled to accepted areas. It is very important that this be a good experience and not a "you-must-win" attitude.

Additional youth groups in other areas of the county should be organized and the older youth encouraged to par-

ticipate in leadership programs. Community support for obtaining meeting places, sponsors, and service programs is necessary to achieve these objectives. Young people need dedicated adult volunteers who are interested in youth and their development.

BENTON COUNTY YOUTH COUNCIL

The Benton County Youth Council is a part of the Governor's Committee on Children and Youth in cooperation with Oregon State University Extension Service. Teenagers representing each high school in the county and representatives from other youth organizations constitute the membership.

This group is affiliated with the Oregon Youth Council. Some of their goals are to work with adults to obtain better understanding between youth and adult groups and to assist in the cooperation of various activities.

The Youth Council is intended to provide an opportunity for all constituent groups to work together. This coordination is planned by a central group rather than by individual groups.

The recommendation of this group is to furnish a building or center where youth will have an opportunity for meeting and talking over mutual problems. It could be operated by the youth but would need to be supervised by adults who would serve as advisors.

Youth Problems

EMPLOYMENT

In the Willamette Valley many jobs are performed by the 12 to 17 age group by picking beans, berries, and fruit, as well as driving heavy harvesting equipment by the older teenager. The needs of the employer are hiring youth with good working, completion, and attendance habits, who will assume the responsibility of the job and the equipment.

Free employment advertisements for youth appear in the local newspaper June 1 of each year (25 words for 6 days), for anyone who wished employment or has a service to offer.

The Youth Employment Service at Corvallis High School was started in 1956 and is run throughout the year. Originally sponsored by the PTA, several organizations now support the program financially without federal aid. There were 616 active members who served the community with part-time or steady jobs in 1967, with youth in the third grade through high school graduates participating. Jobs offered vary from baby sitting, painting, movers, yardwork, cafeteria help, and housework. Volunteers gave 375 hours in delivering and publicizing YES materials, the Open Door Program, and the migrant talent show. Adult and youth advisory committees serve the program. Training courses in catering, lawn care, and babysitting are offered free of charge to registrants.

The committee suggests that with much persistence and patience adult guidance could start YES in each area of the county. More training for the most needed jobs of housework and yard care are needed. The newly formed community college is hoped to help in this field. The committee recommends it is important for youth to be doing

something at the lower pay rates to get experience at work and earn their own money.

SMOKING AND YOUTH COMMUNITY ACTION

The Smoking and Youth Community Action Committee is a committee of high school students and a few adults who are working under the guidance of the health department and, it is hoped, eventually with other groups throughout the county. The purpose is to disseminate accurate information concerning the dangers of smoking. This is a new group in the county, and the project is being carried out through radio programs and group and panel discussions. Interested individuals who are willing to give time and study to help in the prevention of smoking among the pre- and early teens can serve on the committee. The committee recommends that educational programs on harmful effects of smoking be started in lower grades of elementary schools.

CHURCH

Benton County has approximately 45 churches, 30 of which are in Corvallis. A youth consortium of all faiths meets once a month in activities ranging from dances, educational opportunities, religious growth, service to give at home and abroad, recreation, and fellowship. Activities of the church youth groups include creative day activity, education of sex education, how religion relates to the youth of today, vocational choices, migrant ministry, and work with retarded children.

The need of the youth in church revolves around the reconstruction of the church, relations with other people,

receptiveness to new ideas in religion, and the moral issues of the newer generation. The youth must be given a more active role in the workings of the church by putting them on committees and boards, having them become involved in what they could then consider "their" church.

Therefore, the committee recommends that more young people be involved in church activities, both members and nonmembers.

BENTON COUNTY MENTAL HEALTH CLINIC

The Benton County Mental Health Clinic staff consists of a director, two psychiatric social workers, and two part-time psychiatrists, each spending one day per week. Two Portland State students spend two days a week at the center, and all of them carry cases. There is a waiting list of patients. The state wants alcoholics to be treated at mental health clinics rather than being jailed. Child guidance, marriage counseling, physical problems, retarded persons, and family counseling are some of the problems dealt with at this time. The patients are young adults and 65 percent are under 30 years. It is rare for preschoolers to be patients. Teachers spot problems. They could be reached earlier before they become problems. **THE KEY IS PREVENTION.**

Typical is a case where the clinic sees the parents first, then the teachers. Often the caseworker observes in the class room (parental permission only), then works with the parents mostly. Most problems are related to overpermissiveness and a lack of continual control. The children cannot make their own decisions. There is some family counseling. Currently they are handling problems in groups also. There are four groups at the high school. No work is being done as yet at the elementary level. This, however, would be worth a trial, as would a couple at the adult level.

The recommendations of the committee concerning mental health needs in Benton County are as follows: (1) more special behavioral classes for the elementary age group, (2) more programs for vocational and technical training in the area, (3) development of a residential type of treatment for emotional problems, (4) development of a foster-home plan, where adults are trained to help problem children, (5) money to start a pilot program of foster homes (some now are sent to the State Hospital where there is no treatment, only more diagnosis), (6) more parent education centers, and since many parents will not attend meetings, another medium for reaching parents may be to have columns in newspapers with seminars offered frequently, (7) more family counseling centers in group therapy, and (8) more elementary counselors working with teachers.

Committee Members

Mrs. Gayle Abraham, chairman

Fred Quale

Dr. Robert King

Alden Stephens

Bob Robertson

Wendell Waldon

Mrs. Walter Adrion

Judge Robert Gilliland

Rev. Clark

Rev. Hughes

Mrs. Fred Hisaw

Mrs. E.L. Owens

Mrs. Lyle Ellis

Miss Cheryl Bevandich

Mrs. Colleen Cook

Miss Laura Abraham

Keith Drake

John Platt

Kenneth Minnick



The 4-H program teaches by doing and showing. It is one of Oregon's largest informal out of the classroom educational programs.

Public Services, Taxation & Public Finances, & Schools Committee Report

Public Services

Projected population growth with related developments will greatly intensify the need for a number of public services, particularly in the unincorporated areas of Benton County. The development of domestic water supplies and sewage disposal systems poses major problems. Organized fire protection is lacking in some areas of the county. Police protection needs are currently inadequate, and the deficiency can be expected to increase more rapidly than the population.

These and other services that are normally provided on a public basis are vital to the orderly social and economic progress of the county. Because public services have unique characteristics, some or most of them fall behind the current urgent needs of a community. The costs of additional public services affect all persons in the district in some way; occasionally they are disproportional to the specific services received, and some do not want or need the service. Finally, the formation, major money expenditures, and selection of those who develop and operate policies are all in the hands of the majority decision of voters of the area to be serviced. These principles that give strength to our social system require an informed and concerned citizenry. The library program is an example of a good level of public service that was developed at reasonable cost by a cooperative program between the City of Corvallis and the County. The library supplies an important cultural and educational contribution to the county. One of its recognized limitations is that less service is provided to those not close to Corvallis. The branch library system provides a partial answer to this problem. Intercounty and city agreements could further improve library services for areas such as North Albany. The discontinued bookmobile or a similar program should be periodically evaluated as a means of serving outlying areas.

The state legislative interim committee on local government introduced H.B. 1027 to the 1969 session. This act, which passed, authorizes county commissioners to establish a local boundary commission which would review proposals for formation, dissolution, merger or annexation, or withdrawal of territory to or from any city, special district, or county service district providing urban-type public services. The commission can modify or deny proposals and initiate proceedings for development or change they deem to be in the general interest of the area or county. Actions of the committee would become effective only after a favorable vote, as now provided by law.

Such a commission can also study needs, initiate organized community study of problems, and through its powers generally coordinate development throughout the county and beyond where adjacent counties have like commissions.

Recommendations

There are opportunities for public service and other governmental functions to be better served by new organ-

ization or forms of major local governments. Three areas seem worthy of consideration: the county charter form of county government should be reexplored; intercounty consolidation or cooperative action for specified services and functions hold promise for increased efficiency and economy. Administrators and citizen committees should undertake impartial, in-depth studies of these possibilities and take appropriate action when such action is believed to be in the public interest.

The county commissioners should establish and implement a local boundary commission.

SEWER AND WATER

Sewer and water problems of unincorporated areas are now critical in spots, but are only examples of the conditions that will occur if future development continues as it has in the past. Benton County has taken significant initial steps to limit the spread of sewage problems by its sanitary ordinance. The ordinance by itself cannot solve existing problems; it does, however, seek to avoid new problems by land spacing. In a number of partially built-up areas this measure halts land use for homes on open land already lost to agriculture and thus encourages further encroachment on our limited agricultural lands.

A major attraction of rural living is spaciousness. Another value generally held but probably illusory, at least in the long run, is the economy of rural living. The costs associated with providing water, and particularly sewage disposal services, in low-population density areas compromise both of these values. Difficult to develop and costly as these services may be, the public demands for health, safety, pollution control of land and water, and the general quality of living standards will increasingly force acceptable solutions for the problem areas.

Special service districts are the usual organizational mechanism used to solve water supply and sewage disposal programs in unincorporated areas. This means, with adaptations, is expected to continue to provide the major method of solving such local problems.

Recommendations

The county government must be empowered to act decisively and with local authority to solve critical rural sewage problems and to deter development of future problems. The alternative to decisive control is increased pollution with resulting health hazards and general lowering of the quality of living standards. Water supplies are equivalent and related problems in some areas of the county and should receive similar attention where needed.

The public utility concept may provide a new method of solving water supply and sewage disposal problems. Such

a solution, needing state legislature enabling acts, should be explored by concerned citizens and local public officials holding responsibilities over rural water and sewage problems.

FIRE PROTECTION

Fire protection in Benton County is provided by four agencies and local governments. National forest lands are protected by the Forest Service. The State Department of Forestry protects Department of Interior, state, county and private forest lands as well as providing limited complementary protection to other lands and values intermingled with and adjacent to forest lands during fire season. Cities provide their own protection, and much of the remaining rural population is protected by rural fire districts. Throughout the major agricultural areas individual farmers furnish unorganized but important contributions to fire control, primarily during the harvest season. This capability could be greatly enhanced by an informal organization to coordinate local forest protection. Fire protection within the organized areas is reasonably adequate in relation to the costs and values involved.

Approximately 35,000 acres of lands in Benton County are without any organized fire protection or have not the complementary protection of the state system during the fire season. Alsea, Kings Valley, and similar communities fall in the latter category. The major block of unprotected land is mostly agricultural and is located between Corvallis and the Monroe rural fire district boundaries. The unprotected areas are generally characterized by scattered homes and structures with lower assessment values per square mile; both factors increase cost of protection. Further, the land makes up a higher part of the total value, yet basically receives limited value from the protection.

The back-up or cooperative arrangements between fire districts are to be commended and should be extended where feasible.

Recommendations

Fire protection districts should be organized in the unprotected areas of the county to protect values, provide a means of organizing the existing protective capabilities, and to provide a vehicle for administering fire and related laws. Communities within the forest boundaries that are charac-

terized by low assessment values should explore the possibility of leasing unused fire equipment from state or federal forest agencies during the months when the threat of fire is negligible. Farmers in the major farm area south of Corvallis without a fire district should organize a fire district or alternatively develop an informal organization to effectively harness the fire control capabilities of farmer-owned equipment within the area.

POLICE PROTECTION

Police protection is provided by the Oregon State Police, the County Sheriff, and two city police departments, each within its sphere or boundaries of responsibility. Special kinds of police protection are also provided by such groups as the fire districts, the game commission, Oregon State University, and private firms. General police protection is considered good in light of the level of staff available, but is not adequate to meet the present needs, to say nothing of future needs. Some of the special problem areas are general protection for the more highly developed areas outside city limits; the special case of vandalism and thievery at logging locations; and general traffic control throughout the county.

Recommendations

Consolidation or similar organization of the police functions of the sheriff's office and Corvallis city police and police forces of other towns is believed to be a means of providing better protection for the cost. The joint county-Corvallis law enforcement building now under consideration is a major step in this direction.

The need for more policing staff to handle patrol and investigation is apparent and should be supported by the people. The necessity to remain competitive in salary levels to attract qualified personnel and the need to broaden and upgrade training should also be supported by citizens of the county.

A continuing information program should be initiated and aimed at gaining full support and respect by all citizens for police agencies.

Taxation and Public Finances

This committee presents the report of the 1962 Benton County Tax Study Conference. The report, with minor updating reveals a comprehensive study of public finances and is the result of many weeks of work by many people. It contains information and recommendations on all aspects of budgeting and funding.

The total estimated budget requirements for the local governmental agencies total \$20,650,251 for the 1968-69 fiscal year. The individual budget totals were

| | |
|--|-------------|
| Benton County. | \$2,545,364 |
| City of Corvallis. | 6,529,840 |
| City of Philomath. | 663,401 |
| City of Monroe. | 82,897 |
| Combined school budgets. | 10,828,749 |
| Linn Benton Community College is not included. | |

Of this amount \$7,833,953 is derived from an ad valorem tax on property; \$12,816,298 is from other sources.

A major part of the budget needs of the cities listed is obtained from service fees for water, sewers, and paving pro-

jects. The revenue from sources other than property taxes is discussed later. Even without considering the budgets of the state and federal agencies, it is apparent that providing local governmental services is big business and that a sizable part of our income is involved.

PROPERTY TAXES

The assessment of an ad valorem tax on property without regard to its income-producing ability is unfair. The local tax studies have shown marked inequality in the ability of various properties to pay their assessed taxes. Examples indicated that the percent of the gross earnings required to pay property tax varied from 3 1/2 to 30 percent. The ability of property to continue to carry the major share of the cost of education is doubtful. Overtaxation can be a factor in causing property ownership to become unprofitable. This can be a detriment to the economic growth of the counties and the state.

The increase in the valuation of property in many instances is a result of inflation and other pressures and is not consistent with income-earning capacity.

The committee urges continuing study, a broadening of the tax base, utilization of new revenues for property tax offsets, and adjustments to insure that "My share is a fair share."

OTHER SOURCES OF FUNDS

It was noted that \$12,816,298 of the budgets is derived from sources other than property taxes. Part of this amount represents service fees for water, sewers, and paving. Other important sources are the O and C funds, motor vehicle revenue, liquor revenue, federal funds for elementary and secondary schools, basic school support, and some from licenses and special funds.

The importance of these funds in offsetting property taxes must be recognized. These funds must be continued and equitable distribution formulas maintained. We believe that public acquisition of private lands should be kept to a

minimum and that all federal public domain land in western Oregon should be on the same "in lieu of payment" program that applies to the O and C lands.

Some of the funds received from sources other than property taxes are accompanied by standards and restrictions. Evidence exists that some of these standards are unrealistic and prevent the most efficient usage of the funds. These standards and restriction need to be continually reviewed and updated in the light of realism and good judgment.

Recommendations

Citizens of Benton County, including students, should become more familiar with public fiscal management. School curricula at the high-school level should include course work in the local budget-making process, sources of revenue, and characteristics of types of taxes. Some methods of implementing this educational need are: (1) wide useage of the information (updated) included in the 1962 Benton County tax study conference, (2) public news media, (3) voter pamphlets, (4) group meetings, (5) short courses through adult education programs, and (6) acceptance by each individual of his responsibility to be knowledgeable. Budget voting should be an exercise in intelligent decision making rather than a blind confrontation between acceptance or rejection.

All newly acquired public lands should pay annually the equivalent ad valorem property tax the acreage would have paid if it remained on the tax role, or a percentage payment equal to or better than the property tax returns based on revenues derived from the property.

The basic shool support fund should be increased to cost per student, as originally intended in the law.

Local control of our public agencies should be retained to the highest degree possible: the committee is opposed to the creeping encroachment of high echelons of government.

Schools

The Public Services Committee viewed the curriculum aspects of the county's schools. The general topics considered were the present use of facilities, the possibility of utilizing the facilities more fully in order to meet the needs of both the students and the public; and consolidation, vocational training, physical plants, and costs.

The public educational needs of the county are being met by three 12-year districts, 8 grade school districts, and 2 union high schools. Recent adjuncts have been the formation of the Linn-Benton I.E.D. district and Linn-Benton Community College.

The county school offices of Linn and Benton counties have become the Intermediate Education District office, a record and service unit between local districts and the state department. Some services are arranged by contract with districts desiring them, others by resolution of two thirds of the districts, representing a majority of pupils of the county. The I.E.D. is controlled by an elected board. They

employ a superintendent, Mr. W.H. Dolmyer, and upon his recommendation, additional staff as required.

Administrative services, mainly with administrators and school board members, are many and varied. They include:

-Legal services: explaining, interpreting the law, and obtaining Attorney General decisions where the answer is not clear.
-Consolidation, boundary changes, county-wide equalization tax.
- Budgetary advice, auditing, and record-keeping.
-Pool purchasing, joint projects often two-county wide: data processing, and microfilming permanent records.
-Teacher procurement and placement, salary schedules, in-service for them as well as for custodians, cooks, bus drivers.
-Arbitrator between teacher and board and between

the districts and the state department.

The I.E.D. district has an additional function through data processing for the various districts, joint use of an audio visual library, testing services, and staff assistance to meet special educational needs.

The Linn-Benton Community College provides opportunities for educational and vocational advancement in many fields. Classes are held in many areas of the two counties. Emphasis has been on developing job skills. The college works with local industries to meet special requirements. An example is the class being held for seed-cleaning technicians. The college provides opportunities for either college credit or noncredit training. Classes are geared in particular to those not able to attend the regular universities, thus helping to fill a void in our educational system.

The committee surveyed the out-of-school use of educational facilities. In general, there is a surprisingly large employment of these facilities for both recreational and educational purposes. In Corvallis the buildings and playgrounds have virtual year around use because of the cooperation with the City of Corvallis Park and Recreational Department. Another example is the operation of the swimming pool at Philomath. Each school in the county is being utilized to some degree to meet the needs of the area.

The committee believes that the patrons of the various districts have been aware of physical plant needs. On the whole, building programs have kept up reasonably well with ever-increasing demands. Where there are deficiencies, the school boards and communities are involved in planning for improvement.

The cost of school facilities and operations were not considered by the committee, which does not agree with the tax committee report that greater understanding of public

financing is needed.

Recommendations

All areas need development of opportunities in the technical and vocational fields. While much progress has been made, there must be greater opportunity for those whose interest and abilities are unchallenged by the regular curricula.

Study should continue of consolidation of districts and jointly sponsored programs with implementation, where feasible, in order to achieve the best quality education and greatest efficiency.

Nonschool use of facilities is substantial, but opportunities to expand this use for recreational and general educational needs should be exploited where possible.

Vocational educational opportunities are particularly needed and should be expanded by both individual and combinations of districts.

Linn-Benton Community College should continue to utilize local schools, where practical, to bring educational opportunities as close to people as possible.

Committee Members

W.Lee Allen, chairman
Paul Rigor
Leo Wilson
C.R. Hoyt
Loren J. Smith
Harry Smith
Rex Wilson
Lee Grant
Lucille Harnden
James Overbay
Mrs. Harold R. Lucas

Parks and Recreation and Property Rights Committee Report

Parks and Outdoor Recreation

Thirty-five parks plus a number of private and organizational outdoor recreational facilities can be found within Benton County. The development of these facilities range from minimal to rather complete. Taken as a whole, the public park system is relatively undeveloped.

The City of Corvallis operates the greatest number of parks, many of which are well developed and heavily used. The city park system includes 14 parks, 12 within the city limits. Willamette and Rock Creek parks are located outside the city. Corvallis also owns and is primarily responsible for developing the public marina at the mouth of Marys River. Philomath is developing a city park near the high school. Monroe and Alpine both have designated parks.

The county park system includes Mill Creek, Pinkhouse, and Salmonberry access parks on the Alsea River; Clemens park northeast of Alsea; Saxton park on Muddy Creek; and Beals, Horning, and Groves parks near Corvallis; Buxbaum park on the Long Tom; and Oak Waysides on Independence Road. The old established Bellfountain park is operated as a joint venture with the local community. The county park board, with assistance of federal and state funds, recently acquired the Irish Bend ferry park site, a unit of the Willamette River park system. The county park program also contributes to development of the public marina at the mouth of Marys River.

The Bureau of Land Management has parks on the south fork of the Alsea, Bummer Creek, and at Missouri Bend on the Alsea. Siuslaw National Forest plans major expansion of its park on top of Marys Peak for year-around use. Finley Wildlife Refuge has completed park plans and is awaiting construction funds. The State Highway Department operates the Washburn Memorial Park on the Benton-Lane county line.

Some other parks of note immediately adjacent to the north and west sides of the county include a park site gift to Polk County by Boise Cascade Company on Ritner Creek just north of the county line and two National Forest Service parks -- one each on Highways 20 and 34 in Lincoln County, but near the Benton County boundary.

A number of private and organizational parks and recreational facilities serve segments of the population on a free, membership, or service-fee basis. The Hull-Oakes park on the south fork of the Alsea is an example of a private park open to public uses. Several other private parks are available, by invitation in some cases, to large organizational groups. Whispering Winds, the Santiam Girl Scout Council's camp located near Kings Valley, is an example of an organizational camp allowing limited use to certain kinds of other organizations on a fee basis. The First Methodist Church and Elks Lodge are further examples of recreational sites owned by organizations. Private hunting clubs mainly for migratory birds are becoming more numerous.

HUNTING AND FISHING

The Finley Wildlife Refuge, the Wilson Game Management area, and Oregon State University's McDonald Forest have programs providing controlled seasonal hunting. All of the federal and state forest lands are normally open to hunting, fishing, and hiking. Some private forest lands are opened to the public, particularly during big game season.

The Benton County park program is recent. The seven-member park board was first established on November 6, 1957. Within the framework of limited funds, the board's policy has been to give priority to acquiring a network of county park sites appropriately distributed throughout the county while at the same time recognizing some special park needs such as access to the Alsea River. This initial site acquisition plan will be completed with park site acquisitions in North Albany and the Kings Valley-Hoskins Summit-Blodgett-Wren area.

CAMPING FACILITIES

Although need for an overnight camping facility in the immediate Corvallis area is recognized, the committee does not feel that the county park program with its limited funding should consider establishing camping facilities in the foreseeable future. While the Corvallis park program is more financially capable of developing and operating overnight camping facilities, the committee questions that it should. Overnight camping by tenting or the use of tourist trailers or campers is an appropriate private business.

OUTDOOR RECREATION

The Recreation Resource committee of the Upper Willamette Resource Conservation and Development Project has developed an appraisal of the potential for outdoor recreation in Benton County. The report evaluating 12 kinds of outdoor recreation was completed in manuscript form in July, 1968. This report is a valuable reference for use in developing public and private recreation programs in Benton County.

The Willamette River Park System, commonly called the Greenway, is a controversial park and recreational program affecting Benton and other counties adjoining the Willamette River. Established by the 1967 Oregon legislative assembly, it authorizes the development of an extensive river access, camping, recreational trail, scenic drive, and recreational tract system involving acquisition and easements of lands along the Willamette. State and, in some cases, federal funds are made available on a matching basis to assist local governments in acquiring lands. Development and operation are local responsibilities. This program recognizes the undeveloped recreational potential of the Willamette River.

One phase of the Greenway project provides for establishing continuous strip ownership or easements along the riverbank for the purpose of developing a trail system. The Greenway trail system will continue to be an area of public disagreement and conflict. Within this committee only a majority feels that there may be locations where considerable stretches of trail would be appropriate in terms of returns to the users against the cost of establishment and maintenance and other costs to adjoining private landowners.

Local citizens should understand that the present law provides state and/or federal matching funds to acquire Greenway property or easement rights. At present, development and operation of these facilities are the responsibility of the county park board.

An apparent need exists for a public supervised rifle range available on an appropriately scheduled basis. A great many people hunt and the few club and organizational ranges do not fill the public need. A public supervised range would reduce some of the indiscriminate plinking and target practices that are dangerous and often damaging.

A drag strip and possibly other automobile recreational facilities such as an autocross course are desirable for youth interested in cars. Roads used for this purpose are unsatisfactory, illegal, and dangerous to the participants and to the driving public. The need for at least a drag strip is recognized, but the committee believes it is beyond the financial ability of local public park or recreational programs. The absolute minimum drag strip requirements are a three-lane width, level, hard-surface track, one-fourth mile long, with at least this much decelerating length and a separate return road. No such surfaces are known to be available in Benton County.

Recommendations

... The committee supports the park board's priority

policy of acquiring suitable park lands in North Albany and the Kings Valley area.

... The county park program should be geared to filling local park needs not met by other public or private parks. Public park and related recreational programs of other agencies should be encouraged and supported by the county park board, using the means at their disposal. Joint programs with other agencies are a proper means of extending local park funds.

... Preference should be given to using presently owned public lands for park and recreational uses where the location and site are appropriate.

... Individuals are encouraged to study the feasibility of establishing overnight camping facilities near the Corvallis area as a part-time or combination enterprise.

... The park and recreational tract phases of the Greenway program should be established on unproductive lands wherever possible. A continuous trail system as outlined in the Greenway program is not in the public or private interest. The restriction against acquiring Greenway lands by condemnation should not be changed.

... All school grounds should be available after regular school hours for recreation and play. Where supervision is necessary, local people should voluntarily organize to provide this need.

... Individuals, special interest groups, and service organizations should separately or collectively consider means of developing a drag strip and a public rifle range in Benton County.

... To lower the cost of supervision and maintenance of park and recreational sites, the county and city park boards should explore the possibilities of involving youth groups and adult organizations in supervision and maintenance of parks. Such a program could provide service and educational opportunities, broaden appreciation for our parks, and extend park funds.

Property Rights and Trespassing

The problem of property rights and trespass is becoming more acute as the population increases. Damage by trespassers is a serious problem and is increasing. A major difficulty is lack of enforceability of existing trespassing laws. The laws involve a variety of conditions and proof of damage which can seldom be gathered to support successful prosecution. Under some conditions the landowner has little legal power to eject trespassers.

The Criminal Law Revision Commission created by the 1967 legislature has proposed changes in the burglary and criminal trespass laws that we believe will equitably strengthen landowners' rights. Local organizations and citizens have been active in helping to develop this proposal.

The proposal defines criminal trespass in the second degree as occurring when a person enters or remains unlawfully in or upon the premises of others. No distinction is drawn between the trespasser who goes through a fence or one who does not, nor is there distinction as to the trespasser's purpose, nor in distinction of damage. The intent of the section as written is to give more importance to the enforceability than the severity of punishment.

Recommendations

Landowner property rights should be strengthened to provide more effective control of trespassers. The committee supports the proposed legislation dealing with trespassing written by the Criminal Law Revision Commission and intended to be presented to the 1971 legislative session.

Committee Members

Sam Crocker, chairman
Harold Werth, secretary
Mrs. Margaret Hull
Orval Thompson
Mrs. Clyde Richards
Glenn Holcomb
T.J. Starker
Mrs. June Murphy
Mrs. Clair Miller
Gene Nygren

Rural Area Land Use, Environment Pollution, and Transportation Committee Report

Land Use and Zoning

Increasing quantities of agricultural lands in Benton County are lost each year to urban uses. Preservation of these lands, particularly the better types, is vital to the future of the Benton County agricultural industry. The effects of land lost to agriculture extend to the nonfarmer as well. The open areas and all that livability implies are reduced as farmlands are lost and incompletely developed areas occupy these lands. The economic impact of lost raw agricultural production affects more people than is realized.

Scattered and partially developed urban growth on agricultural lands creates special problems. The normal activities of the farmer and the nonfarmer are often incompatible and create dual harassment. Costs of local tax-supported services demanded by nonfarm development are seldom, if ever, recovered from the value of scattered developments, so surrounding agricultural lands and values pick up some share of the difference. The characteristic partial development of a block of agricultural land is particularly unfortunate. The mingled, undeveloped areas of cropland are lost or economically unattractive to agriculture and too often lie unused to the detriment of the owners and adjacent developed areas. These areas are not attractive to new developers, who find open cropland areas more attractive.

Zoning is a workable means of implementing land-use planning aimed at preserving as much of the better agricultural land as possible without stopping other kinds of developments. Zoning lands exclusively for agriculture will encourage orderly and more complete development for urban uses on lands less suited or already lost to agriculture.

The limits on freedom of decision and economic losses that land-use controls will impose on some individuals are recognized, but the importance of saving land for agriculture, for livability, and other long-range benefits to the county and its people substantially outweigh these rights of the individual.

Recommendations

....The county planning commission and county commissioners in their administrative role, supported by individual in agriculture and its organizations, should promptly undertake steps to safeguard, through zoning, the maximum amount of our better cropland.

....An exclusive agricultural zone should be established, and this zone should receive equal consideration in priority needs enjoyed by other zones. The land-use plan developed to support the exclusive agricultural zone should rely heavily on soil classification, an important measure of potential soil productivity.

....The presently unzoned flood lands of the Willamette River and other streams should receive early priority for agricultural zoning with other agricultural lands to receive consideration shortly thereafter.

....Exclusive agricultural zones should enclose or be pierced by a minimum of other zones to minimize the mutual harassment each use imposes on the other.

....Substantial areas presently zoned RA and some RW lands are now completely agricultural in character and in many cases adjacent to other unzoned agricultural lands. The planning commission supported by agricultural interests should restudy these areas and zone those appropriate as exclusively agricultural.

....Land zoned exclusively for agriculture should not be subject to continuous nibbling for other uses. The planning commission should develop regulations that restrict consideration of zone change applications from exclusive agriculture to five-year or longer intervals. Certain specified circumstances would necessarily need to be exempt from this regulation.

....Consideration should be given to establishing a permanent advisory group from the farm population to work with the planning commission in matters relating to establishing and retaining a maximum amount of the better farm lands for agriculture.

Environmental Pollution

During the past two to three decades, the grossest and most obvious forms of pollution have been reduced markedly in Oregon and in the rest of the country. Many factors, however, are at work that offset this progress as the overall problem is considered. Many of the problems of pollution cross county and even state boundaries.

The potential for a highly polluted environment is a constant source of concern for many Benton County citizens. The pollution of the air that we breathe has increased greatly during the past decade. A study of visibility trends at a Willamette Valley airport revealed that citizens of that

community experienced loss of visual contact with some surrounding terrain features on two of every three potential opportunities in January between 1958 and 1967. A distant terrain feature that could be observed on 15 days in January 1958 could be observed on only 5 days in January 1967. The loss of visibility was not due to rain or fog. For August, the same loss of visual contact occurred on 9 out of 10 potential opportunities. Reduced visibility is related to the contaminant loading of the air near the ground.

The Willamette River system is considered Oregon's major water pollution problem site. Pulp and paper-process-

ing effluents are its principal waste source. Projections, both for the nation and for Oregon, point to further expansion of Kraft pulping. As Kraft operations expand, relative to other processes, there will be more concern with toxic materials in relation to aquatic life and emission of foul-smelling sulfur gases and particulate material into the atmosphere. The technology for control of harmful components into both receiving waters and the atmosphere is such that, if regulation or other control programs are adequate, detrimental effects to streams and the atmosphere can be minimal except for odorous gases. The Kraft process constitutes one of the more irritating air pollution problems.

Thermal pollution or increased water temperature could become a water pollution problem of considerably increasing concern and could well become a more limiting factor in fish production than oxygen depletion in certain rivers and streams.

AIR POLLUTION

Principal sources of air pollution in the Willamette Valley are the forest industries (including pulp and paper mills), metallurgical industries, field burning, commercial and yard incinerators, and internal combustion engines.

Recommendations

All sources of air pollution should receive immediate attention, and programs should be developed to significantly reduce air pollution. This goal can be attained by: (1) greatly accelerating research to determine economically sound uses of waste products from agriculture and forestry; (2) developing emission standards for all types of air pollution (especially odorous gases) and establishing and enforcing detailed compliance schedules; and (3) establishing a central coordinating agency to control the burning of waste products of industry, commercial activities, agriculture, and individuals with control over both private and public owned activities.

WATER POLLUTION

In Oregon, attention to water pollution has been centered on three principal problem sources. These are (1) heavy loading of organic wastes into streams, which causes depletion of dissolved oxygen, slime growth, and bottom sludge deposit, mainly from the pulp and paper industry, the food processing industry, and domestic sewage; (2) possible pathogenic organisms from human waste sources; and (3) toxic materials from industrial or agricultural sources. While progress has been made in reducing pollution during the past decade, many problems still remain.

Pollution problems exist in all of the principal streams in Benton County and most of the small tributaries. With increased use of most of these streams for municipal water supplies and commercial and recreational use, greater efforts must be made to identify and control pollution.

Recommendations

... All the principal streams in Benton County and the Willamette River at Peoria, Corvallis, and Albany should be monitored for water quality on a weekly basis during the summer recreational period and at least twice monthly during the remainder of the year.

... Pollution control programs should be established and maintained on all principal streams that will result in water purity suitable for swimming and for trout.

... The water standards already established by state and federal agencies should be strictly enforced.

SOLID WASTE DISPOSAL AND SEPTIC SYSTEMS

Present methods of solid waste disposal in Benton County pollute the air, water, and soil. Septic tank systems in the more densely populated areas and other areas having unsuitable soils frequently contaminate ground water and adjoining lands and streams.

Recommendations

... Densely populated areas in Benton County outside cities should discontinue the use of septic systems at an early date, and residents should develop sanitary sewer systems.

... Further construction in potential problem areas should be stopped until sanitary sewer systems can be incorporated into development plans. This responsibility rests primarily with county officials through the Benton County Health Office.

... New solid-waste disposal sites should be developed and operated on a sanitary land-fill basis.

CITIZEN INVOLVEMENT

To protect and improve the livability of Benton County, it is the responsibility of every citizen to become involved in planning for a cleaner environment. With the pressure of increased population, pollution problems will become more serious.

There are numerous ways in which concerned citizens can plan and work for a cleaner environment. They can become active in existing organizations and keep the members informed of pollution sources and the need for action. They can support the agencies already dedicated to clean air and clean water, such as the Oregon State Sanitary Authority and the Mid-Willamette Air Pollution Authority. Such support will likely require an increase in the budgets of both organizations and about one dollar of added taxes per person.

Citizens can also work for a cleaner environment by abiding by the regulations on burning and trash disposal and by installing the necessary antipollution devices on the cars they operate. And finally, citizens can make a significant contribution to a cleaner environment by refraining from littering the country-side with paper, bottles and other forms of refuse.

Without adequate staff, the enforcement agencies will not be able to conduct the type of surveillance and control programs necessary to keep our environment livable.

Recommendations

... Each individual citizen should exercise his responsibility to reduce air, water, and soil pollution on lands and in activities under his control.

... Pollution control enforcement agencies should be financially supported at a level that will assure steady improvement of our pollution problems.

Transportation

Road improvements in Benton County at state, county, and city levels have been very substantial over the past decade. Yet, today's overall road situation is little, if any, better and is much worse in some localized areas. The rapid-growth of rural nonfarm homes has created many localized problem areas outside of Corvallis. Population and commercial growth, more vehicles per family, increased recreational and social travel, and the continually increasing demand for better quality roads all go to offset the effect of road improvements.

Funds are inadequate to meet fully current county and city road needs. At varying levels, this gap between road needs and funds can be expected to continue indefinitely unless major changes occur in funding sources, particularly from the state or federal level.

We join in supporting the existing citizen committees working for improvements of state highways 20 and 34. These routes are the county's major road links with other areas and are increasingly important, particularly toward the coast.

Recommendations

... Overall conditions of county roads can be improved within the funds available by placing greater emphasis on some types of maintenance. Specifically, more emphasis should be placed on drainage ditches and outlets, additional brush and weed control at blind corners and places of restricted vision, removal of special hazards such as trees or large rocks near the roadbed, more reflective warning mark-

ers, and exchanging stop for yield signs in some areas. School bus routes and bus turn-arounds should receive special attention.

... Better long-range planning for major county road improvements is in the public interest. Firm priorities and scheduling of major improvements should be projected at least two years forward, with a secondary level of planning extending an additional three years. The firm schedule may be delayed because of funds, but it should not be altered except as made necessary by naturally caused emergencies.

... The county commissioners should undertake a comprehensive study to determine if at least some part of major road improvements can be more economically provided by private contractors. We believe there are economies in contracting heavy grade work and restricting county equipment to efficient rock hauling, finish grading, and maintenance equipment.

Committee Members

Gene Dannen, chairman
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David Barclay
Delbert Pitcher
Otto Vollstedt
Mrs. Lee Mohnike
Lee Jorgensen
Dale Schrock
Charles Fischer
Mrs. Myrtle Berklund

Industrial Development Committee Report

AGRICULTURALLY RELATED INDUSTRIES

Agricultural products produced in Benton County find markets in several ways. Food-processing plants and seed-cleaning establishments produce such agricultural products. Some of the marketing is outside the county, because raw products are often shipped to Albany, Eugene, Salem, and Stayton for processing.

In the county a major cannery and a freezing plant both process fruits and vegetables. There are also a food dehydrator (foam-mat process) and a poultry processor.

There are 18 seed-cleaning and grain warehouses and a sizable potato warehouse in the Monroe area.

In addition to the processing and marketing organizations, several fertilizer, equipment, and supply dealers depend upon a strong agricultural industry. It has been stated that each dollar produced on the farm generates \$2 in benefits to the community through farm labor, supply purchases, etc. Also, the processing of fruits and vegetables triples the value of agricultural products. Part of the increased value goes into the local economy by way of processing wages, transportation, and other services and goods.

FOREST PRODUCTS INDUSTRIES

Forest products manufacturing is of prime importance in Benton County. Many jobs and businesses are supported by the harvesting, manufacturing, and transporting of forest products.

Availability of the raw materials in the forests and as mill by-products makes this a strong segment of this changing industry. In the early days the timber industry was comprised mainly of the processing and marketing of logs and timber. Now the timber industry is diversified with a heavy emphasis on veneer, plywood, and other wood products.

Presently the following types of forest products manufacturing companies are operating in the county: (1) The Corvallis area -- 3 plywood plants; 1 lumber mill; 1 hardboard plant; 1 paper pot manufacturer; 1 battery separator plant; and 1 fiber pipe plant. (2) The Philomath area -- 1 veneer plant; 6 lumber mills; 1 oar company; and 4 planer mills separate from sawmills. (3) The Dawson area -- 2 lumber mills. (4) The Kings Valley area -- 1 plywood veneer; and 1 sawmill. (5) The Alsea area -- 2 sawmills.

The above statistics do not mention the many allied businesses such as machine shops, truck firms, saw firms, etc., that exist because of the timber industry.

OTHER INDUSTRIES

Benton County has some diversity of industry other than those mentioned under agriculture and forestry. The other industries include engineering firms, Oregon State University, military installations, and numerous small manufacturers. These other industries could be classified as ser-

vice, manufacturing, and government.

Service industries locate here for convenience of markets, but numerous small manufacturers choose the area as a favorable place to live and often for nearness to raw materials. The markets are not convenient for manufacturers of pipe, metal products, water purification equipment, etc. Most of the manufactured products are sold a good distance from this area.

Government industries include Oregon State University, military installations, and various tax-supported research organizations. The largest total pay-roll is under the government industries.

PUBLIC RELATIONS OF EXISTING INDUSTRY

One of the main problems facing the present industrial community is that of public relations. The general public is concerned with the livability of the county, while the industrial community would like popular support. Apparently a majority of the people want industrial development but want only light, clean industry.

Committees studying this problem could not agree on what is the most desirable industry. It was recognized that many industries would be acceptable to the community. The attitude of management and the appearance of the facilities is probably more important than the manufacturing process. For new industry to locate in an area, the public climate must be attractive.

ASSETS AND RESOURCES WITHIN THE COUNTY

Benton County has 94,000 acres of tillable agricultural land. There are 260,000 acres of forest land available. These, plus a skilled and educated population, are the main raw materials available.

Improved management and practices have increased the supply of raw materials over the past several years. The optimum utilization of these materials has not yet been attained.

Some raw materials, formerly wasted, are now being utilized in various manufacturing processes, such as bark and chips from the various lumber mills. Formerly waste materials, these are now converted to hardboards, paper, horticultural mulches, fuel asphalt impregnated pipe, and other products.

Transportation facilities are generally good in the county. Although not located on the main railroad line and freeway, the county has speedy access to both of these transportation arteries. A major railroad company has rail lines into all areas of the county. Three state highways crisscross the area and the local roads are good.

Rivers run north and south and east and west. However, there is insufficient water development in some areas which have been zoned for industrial use. An opportunity

exists for some improvement in the utilization and availability of water.

The population of the county in 1966 was 47,000.

Population by Age Groupings

| Age Group | Total | Percent |
|----------------------------|--------|---------|
| Total population | 29,165 | 100.0 |
| Under 5 | 4,350 | 11.1 |
| 5-9 | 3,697 | 9.4 |
| 10-14. | 3,245 | 8.3 |
| 15-19. | 4,368 | 11.1 |
| 20-24. | 5,241 | 13.4 |
| 25-34 | 5,129 | 13.1 |
| 35-44 | 4,292 | 11.0 |
| 45-54 | 3,353 | 8.6 |
| 55-64 | 2,608 | 6.7 |
| 65 and over | 2,882 | 7.4 |

This population is fairly well educated:

Education 25 Years and Over

| Total No. of persons 25 & over | No. of persons 25 & over with less than 8 yrs. | % 25 & 1 over with less than 8 yrs. |
|--------------------------------------|--|---|
| 18,263 | 1,570 | 8.6 |

PROBLEMS AND QUESTIONS

The Industrial Development Committee pointed out several problems and questions about industry and its progressive development. There are not always specific answers to these questions:

.....If this area has a business or industrial climate, what is that climate?

.....Are railroad, highway, air, and water transportation facilities sufficient to take care of present and future business?

.....Some believe there is an anti-industry attitude in the area.

.....How will proposed new zoning laws affect business and industry? Has sufficient area been zoned for industrial parks, etc.?

.....Some areas that are zoned industrial have shortcomings, such as the poor water facilities in the Camp Adair industrial area.

.....Is labor force of quality and quantity for development?

.....Is more education for the general public as well as for skilled labor going to be a challenge?

.....Has everything been done to help present local industries expand and prosper?

.....What is the need for industrial activity?

ZONING

Zoning and the patterns of community planning affect the whole future of industrial development. Lack of planning and zoning can lead to transportation congestion, scenic blight, water pollution, and a stagnation of growth that may deflate property values.

Planning and zoning considerations must involve all segments of society with a stake in the region's future. The general public should take an active interest in the work of the county planning commission.

Wise use of land, water, air, and timber resources should be the primary objectives of planning groups. Conservation of these resources will support the industrial development of the present as well as the future.

Industrial zoning is broken down as county (outside city) and city zoning. There are 4,760 acres zoned for county, almost all of which is for heavy industry with only 2,016 acres being used. A good portion of the area not being used is in the airport industrial park, which can only be leased and not purchased. Also included in the unused portion is area not suitable for heavy industry because of lack of water. The city is zoned for 390 acres, almost all of which is for light industry.

SUMMARY

Industrial development is only a part of overall community development. A healthy community is one which has a diversified base, that is, a community dependent on several sources of income.

The industries of Benton County are primarily those based on agricultural processing and forest products manufacturing as well as the large government industries: Oregon State University, research laboratories, etc. Many small businesses support the larger industries such as saw shops, machine shops, engineering firms, etc.

The trend in the county is for increased forest products utilization, increased fruit and vegetable processing, and increased research and educational activity.

These three types of industry are not in conflict. They support each other. However, planning for the future is necessary if industrial development is to continue while maintaining a high level of livability which is important to the people in all three major industries. Livability includes such things as (1) quality of education, (2) clean air and water, (3) recreational facilities, (4) adequate facilities such as police, water, sewers, electricity, fire protection, transportation and roads, (5) cultural activities, (6) quality homes, and (7) beautification of cities and commercial areas.

RECOMMENDATIONS

... Persons interested in industrial development should acquaint themselves with the present situation and possibilities of future development.

... Close attention should be given to basic items such as transportation improvement. Water resources also need more development for agriculture, forestry, and industry.

... It would be desirable to have an action committee that would sponsor educational meetings on local industry,

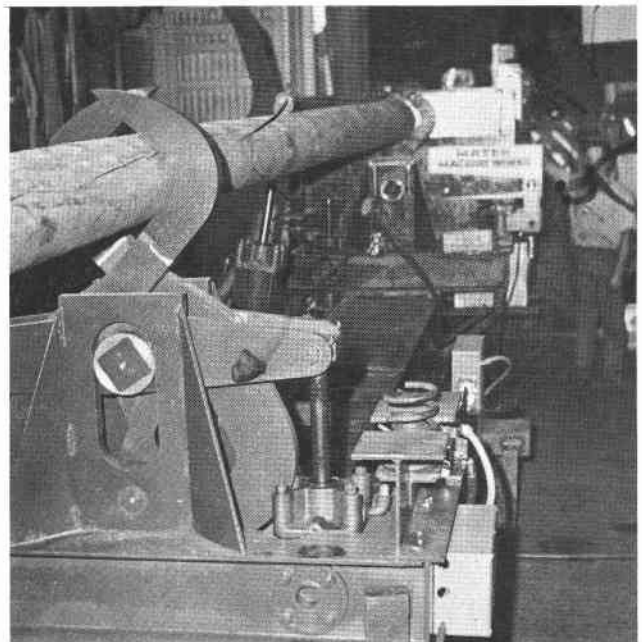
taxes, zoning, etc., all of which relate to industrial development. An educational committee could work toward dispelling anti-industry sentiment.

... Every effort should be made to strengthen and assist present local industries in achieving their growth objectives.

... Community planning should aim toward objectives of economic growth while maintaining good standards of environment. This can only be accomplished by active interest and participation of all citizens in community development and planning.

Committee Members

Roy Hathaway, chairman
Martin Thingvold, secretary
Mike Locey
Stan Starr
Gordon Packer
W.D. Brown
Bob Wheeler
George Case
Dean Tatom
Rod Brenneman
Bob Moench
Burt Hoenselaar
Dr. Jean Mater
E.R. McLagen
Bruce Starker
Major Charles Corwin
James Dunn
Alan Dapp
Bob Pailthorp



Unique machine developed by Mater Machine Works, Inc. to drill holes through the length of 40 feet utility poles. Conduits are passed through the holes to facilitate underground wiring. Mater Machine helps woodenpoles compete with steel, aluminum and other materials.

Fish and Wildlife Committee Report

Fish Resources

WILLAMETTE BASIN

Bass and bluegills, catfish, and crappies are found in the Long Tom River, river bottom lakes, sloughs of the Willamette, and the main Willamette. These fisheries are not fully utilized and could stand much more pressure.

Cutthroat trout are found in all streams of Benton County. They are rare in river bottom lakes. Cutthroat migrate upstream from Marys and Luckiamute rivers into smaller creeks in late February and March to spawn. During the late spring they migrate downstream into deep, cooler, shaded water. Spring plantings of trout are made in the Luckiamute and Marys rivers by the game commission prior to opening of the fishing season.

Salmon and steelhead use the main Willamette to migrate upstream. They are seldom sought after by anglers in Benton County. A new fish ladder at Oregon City has enabled a greater upstream movement of salmon and steelhead.

Trash fish such as carp, suckers, and chubs are numerous and on the increase in the Willamette and river bottom lakes and the lower reaches of Marys and Luckiamute rivers. A trial program of killing trash fish in Thomas in Linn County and immediately replanting with trout was tried in 1968.

Bull frogs are common in the Willamette River bottom area. Crayfish can be caught in most streams; however, few people fish for them. Most angling is done by local residents and by only a few people from much distance.

Problems

The biggest problem facing the fishery is the lack of adequate summer stream flow water to keep water temperature down and reduce pollution. Irrigation and more industrial and municipal use, which are all expanding, affect the flow of all streams. Some smaller streams have been denuded of brush for irresponsible flood control and drainage, which causes the temperature to rise and destroy deep pools and fish-feeding areas. Harvesting of old-growth timber and mature second growth has been largely completed, and younger second growth is coming back. In addition, the area is supporting more forest land. The soil erosion problem, while not perfect, is much better than it was 20 years ago. There is much less farm waste finding its way into the streams than 20 to 40 years ago because of fewer livestock and better manure disposal methods. Insecticides, often cited as the cause of fish depletion, have narrowed down to those that are not harmful if properly used. Little or no DDT is used, whereas 30 years ago 20,000 acres of cropland were treated annually for vetch weevil with DDT.

Rainbow trout make exceptionally good growth when disease from trash fish does not bother them. They are

quite susceptible to disease in the west side Willamette basin waters.

ALSEA BASIN

The Alsea Basin contains 118,000 acres, or 28 percent of Benton County. Fish in the Alsea consist of cutthroat trout, chinook salmon, silver salmon, steelhead trout (mostly winter run), and crayfish. The salmon and steelhead trout are migratory fish which come back to where they are spawned or released.

Fish Resources

Cutthroat trout are in the river during the entire year; however, a sea run varies with the water conditions and migrates under favorable water conditions. Some native cutthroat trout remain in the same approximate location during the entire year. They are mostly in the tributary streams above falls. When the water level is normal, catches are larger. A cutthroat research study has been under way for several years on the Alsea River. Presently from 20 to 30 thousand fish are being released during the spring months at a number of sites from the town of Alsea downstream to Mike Bauer park. The study will determine the best stocking rates and time and area of release not only to provide a suitable spring trout fishery but also to provide improved summer sea-run cutthroat fishery in the bay and lower river. River trout anglers harvest about 10,000 fish and another 3,000 to 5,000 cutthroat are taken in tidewater.

Salmon species and steelhead trout spend two to four years in the ocean before returning to their native freshwater home.

The spring chinook enters the ocean at one year of age and returns to the river after spending from one to four years in the ocean (majority are three or four years at spawning). Spawning takes place in late September or early October. The spring chinook run in the Alsea is small, probably only several hundred fish. The majority of the run holds and spawns above Five Rivers. Summer water quality is extremely important to this race of fish, as they are quite susceptible in warm water to predators (primarily man) during low flows.

Fall chinook are much more abundant, and the run may number several thousand fish. Falls generally rear about three months in the stream prior to moving to the bay and ocean during the spring months. Some evidence indicates that many falls do not move directly to the ocean but take up temporary residence in the bays for an indefinite period prior to their movement into the ocean. Most fall chinook spend three years in the ocean before entering the rivers to spawn in October and November. Most all of the larger Alsea tributaries and the upper river including the north fork have fall chinook runs. Several gabions (small

rock dams) have been constructed by the research division of the Oregon State Game Commission in a bedrock area just above Five Rivers. Spawning gravel has been placed beyond the dams with the hope that the chinook will find these artificial areas suitable for spawning. This program will undoubtedly be expanded if positive results are obtained from the tests that are now under way.

Silver salmon or coho move upward in October and November. Huge runs of these salmon have been developed on parts of the Alsea by the Oregon Fish Commission through their hatchery program located on Fall Creek, which is in eastern Lincoln County. This program has vastly improved downstream fishing in the Fall Creek vicinity and contributes to the ocean fisheries for commercial and sports catches. The salmon from the Fall Creek hatchery on the Alsea are released from the Fall Creek hatchery. The hoards that return to Fall Creek are far more than the hatchery needs. The extra fish have lost their prime as edible fish even though they are to a large degree salvaged and sold to processors. The present program does provide a means of making genetic selections and determining how well the fish return. Different release locations are being considered for the future.

The Alsea River has become one of the outstanding steelhead fisheries in the world for winter steelhead. The hatchery program of the Oregon State Game Commission located on the north fork of the Alsea River has contributed to this development. A new scientific feeding and rearing pond approach has enabled the commission to release large silver and steelhead smolts which grow faster and survive better. The hatcheries also provide fish for other streams, and some of our other coastal streams are approaching the production of the Alsea for winter steelhead. The steelhead catch on the Alsea has increased from 617 in 1960-61 to 4,783 in 1967-68. The 1965-66 year was the highest, with 7,609 caught. About 100 to 125 thousand smolts are being released into the Alsea River each spring. Of the total, 50 thousand are being released at the hatchery so as to assure an adequate egg take, and the remaining fish are released at several sites from Salmonberry bridge downstream to tidewater. It has been discovered that the steelhead upon return to the river will linger at its release site. Releasing fish downriver spreads angling intensity and steelhead catch over the entire river for a longer period. Paul Vroman is also attempting several experiments at the hatchery with steelhead diets and selective breeding.

A summer steelhead run has been developed in the Alsea Basin, but because summer water levels are often below a good condition for a summer steelhead fishery, this program is not being expanded at the moment.

In 1967 the combined catch (punch card estimate) of salmon and steelhead on the Alsea River exceeded that of any other Oregon river with the exception of the Columbia. The salmon catch was estimated at 16,000 fish. The Alsea is probably the most popular drift boat stream in the state, with up to 125 boats present on good weekend days. Considering the river's relatively small size in comparison with many other Oregon rivers, the Alsea undoubtedly has one of the highest angler densities in the state. Over 70,000 angler days are recorded annually for all fisheries combined. A national survey (1965) indicates that about \$6.50 is spent for each day of fishing. When these costs are applied to the

Alsea, sport fishermen spent about \$450,000 in pursuit of the various fisheries.

Crayfish are being utilized to some extent by people but in a rather limited way for their own use. Crayfish provide feed for trout and fur-bearing animals.

Water Problems

Two water problems exist in the Alsea Basin. They are low summer water flow and sedimentation from logging road and highway construction. Logging, to a large degree, is done in summer months. More selective logging is being practiced. Logging, which is necessary to the economy of our area, contributes to silation to some degree but in itself is not as bad as branded. Road construction is the worst. Roads also occupy about 8 percent of the timberland area. Logging methods and equipment will always vary with the terrain and economic conditions.

Sewage disposal from residential property may become a serious problem as housing and recreation expand, which they will with increases in population.

The removal of logging debris from creek channels is sometimes overdone to the point where the creek is more of a drainage ditch, and as erosion continues more holding pools are eliminated. Some lawsuits have occurred when loggers cleaned up stream beds; this operation resulted in summer water temperature rise, creating unsuitable water habitat for fish feed and fish. Streambank shade and cover is often reduced or eliminated in logging, farming, road construction, and for housing. This shade reduction boosts summer water temperatures and often creates erosion.

FARM PONDS

Several farm fishponds are located on private land in Benton County. Most of these support bass, bluegill, crappies, and frogs. Some are used for trout production, including rainbow and cutthroat. Such ponds are usually stocked with rainbow because of availability of the fish. They would be more suited to cutthroat trout because of disease problems in the Willamette Basin, and cutthroat are more naturally adapted to our conditions. It is a rugged species of fish and will grow as well as rainbow under the same conditions. Some fishermen say there is nothing equal to cutthroat for its scrappiness when compared to other fish of the weight.

Farm fishponds are often poorly designed as well as poorly managed. Improper bank shaping encourages weed problems. Shade trees to help keep summer water temperatures down are not present nor planted. Most pond owners fail to maintain the high level of pond and fish management necessary for maximum fish production. Farm fishponds are a financial liability except that they may be profitable when property is sold. Aesthetic values of farm fish ponds often more than offset the financial costs.

MAJOR WILDLIFE

Deer

There are more deer today in Benton County than at any time prior to the early settler period. This is because of vastly improved feed conditions throughout the county. The deer kill has steadily gone up on the McDonald Forest and Camp Adair area which is owned by Oregon State Uni-

versity. The area is a 13,000 acre refuge which has been open to controlled hunting for 15 years. Damage was excessive to trees prior to controlled hunting. Hunting was finally authorized and one of the objectives was to see if an area could be overhunted with the present method of hunting deer in Oregon. There is annually one hunter for less than 20 acres. The first year 504 deer were taken. Ten years later 503 deer were taken. Last year 250 deer were taken. All deer are weighed in. There has been no change in the size of the deer of either sex. The size 15 years ago was average for blacktail deer under good feed conditions. On the Marys Peak water shed, another refuge, deer were damaging trees and they were small animals, averaging 60 pounds per deer when this area was first opened. The deer were also unthrifty because of the large number. When they were thinned out, the size went up to 100 pounds per deer killed.

The blacktail deer should be hunted for the population to remain at a high level. Research work by the State Game Commission in the Tillamook burn has shown that a higher level of deer exists where they are hunted. In a large enclosure where the deer are not hunted, numbers built up to a certain level and then started downward. Deer can become a problem with reforestation, agricultural production of crops, and sometimes are a traffic hazard.

Game Birds

There are 34 private migratory duck ponds and ample Canadian goose pasture for winter purposes. The William Finley wildlife refuge consisting of 5,300 acres is located in south Benton County. The State Game Commission has some facilities at the Wilson Farm located in north Benton County. Winter feed and resting areas are very important for migratory fowl to do well.

China pheasants are located in good numbers on the main valley floor, although the population seems to be dwindling in recent years because of poor habitat, increased predators such as coon, skunk, fox, house cats, Douglas ground squirrels, and kill by automobiles. Valley quail are found in good numbers where there is good brush cover. Some people object to hunting them. Where they are not hunted the coveys dwindle in the wintertime also. Evidence shows that a good winter feed supply is helpful in keeping a high pheasant population. A large amount of pheasant cover has been destroyed by clearing fence rows and patches of brush. Farmers have been forced into such a program to a large degree because of high taxes, land values, and the economic squeeze they are in.

Agricultural chemicals are often blamed for bird decline. This is not the case unless the chemicals are used in greater than recommended rates and kinds. Most chemicals are short-lived when exposed to the elements of weather. Chemicals have an indirect affect on bird life because they kill feed. Insecticides kill insects which are bird feed. Herbicides kill weeds which produce seed eaten by birds. An example of high chemical usage and high bird population is the irrigated area of Malheur County. These irrigated areas produce much pheasant feed and have water. Adjoining sagebrush areas provide an abundance of feed and cover areas.

Other game birds are bandtail pigeons, doves, and two species of grouse.

Fur-bearing Animals

Populations of beaver, raccoons, and fox seem to be at a favorable high level.

Nutria, which is a pest of little fur value, has found its way in sizable numbers in most of our waterways in the county. The nutria is a threat to agricultural crops of all kinds, to trees along the streambanks, and to waterfowl feed. They multiply rapidly -- nutria raise two litters a year, averaging five per litter. No organized control program exists.

Another imported pest is beginning to appear in Benton County, the possum. It is expected to become a serious pest in a few years. Possums came from the south when CCC boys brought a few for pets in the thirties. Norway rats are sometimes found in greater numbers along waterways.

PUBLIC ACCESS

The privileges of going over private and public land by sportsmen is earned rather than given or taken. There will definitely need to be an increasing amount of access to our waters in the future. Neither can all of the shorelines be completely turned over to fishermen at all times because of economic reason.

Legislative moves are being made to prevent removal of any cover one-half mile back from the banks of certain streams.

Sportsman conduct and private landowner relationships and access to the facilities for the fishery program on the Alsea need to be improved. Although much progress has been made, the solution has not been fully achieved. Leaving gates open, leaving garbage, fishline, and hooks, and mashing fences down are still a fault of some. Jet boats are beginning to show up.

Some people believe there are too many fishing on the Alsea during the winter steelhead run. Outsiders come from far and near. It is an easy stream to reach. Fishermen have not learned that good fishing exists elsewhere on coastal streams. This creates access and sportsman-conduct problems. Access agreements have been made by some landowners and the game commission.

County courts, USF, and BLM have been expanding boat launching and parking facilities at a steady pace as funds become available. The game commission and Marys Peak Chapter of the Izaak Walton League have been active in promoting access and good sportsmanship conduct.

THE GUN LAW

The recently enacted federal gun law is under the jurisdiction of the internal revenue department for administration and writing regulations. It is highly questionable whether the gun law will reduce crime as it is expected to do. It may lead to the use of other readily available materials by criminals that are more destructive than guns. The first few days of operation by gun and ammunition dealers found the law too time-consuming and expensive to handle. For example, it required five minutes to sell a box of 22 shells costing 90 ¢. A form had to be filled out. The customer had to provide identification even though the salesman may have been a close friend for 50 years. Reputable gun dealers have been recording gun sales since 1932.

The Sullivan Act of 1911 for New York City is considered to be one of the strictest gun laws. It has not stop-

ped crime. New York has been famous for some of its underworld activities and gangland slayings.

Much emotional feeling helped create the federal gun law. With each new legislation there is always increased gov-

ernment cost at all levels of government. We have a constitutional right to bear, own, and possess firearms. This right serves as a national defense measure of great value.

Recommendations

.....Chemicals used in agriculture and forests should be confined to materials and methods of application recommended by OSU. They have been approved for specific uses by federal and state agencies. These chemicals have also been screened and researched by the chemical companies for toxic effect on plants and animal life of all kinds.

.....Upstream development of water storage for larger and cooler summer stream flow should be carried out in an orderly fashion when feasible to reduce water pollution and improve fish habitat. Such developments will need to be multiple-purpose projects.

.....Small check dams should be considered for holding back water in the summer for multiple use where stream channels have been cleared for drainage and flood-control purposes. These would be check dams with flash boards that can be removed in the fall. Consideration needs to be given for reestablishment of streambank cover to provide shade trees for these channels to help keep water cool.

.....In the event Muddy Creek is ever cleaned out according to the Corps of Army Engineers' specifications, it would be desirable to keep many portions of the old channel open for allowing water to enter and escape to provide more fish and game area as well as irrigation and drainage facilities. Summer water levels of the side ponds from the old channel can be kept up by moving water from the Long Tom into the Muddy Creek area.

.....Logging should be done uphill when possible to reduce stream and soil erosion. Summer logging from April 1 to October 30 causes much less winter erosion. A logging road up the north fork of the Alsea River should be avoided if at all possible because of the effect it could have on water quality and detrimental effects on the north fork Alsea game commission fish hatchery. When logging roads are constructed, they should be as narrow as possible to reduce soil erosion. There is ample BLM evidence of roads being constructed wider than necessary. Much of the remaining permanent logging road construction will be completed by public agencies. It is recommended that they mulch and seed new road construction in the manner practiced in the Siuslaw National Forest. Their program greatly reduces erosion. A prime example is their work in Marys Peak water shed. It is the opinion of the committee that 85 to 90 percent of the needed logging roads in the county have been built.

.....Additional concentrated and individual family housing in the Alsea Basin should consider new improved methods of sewage disposal to reduce underground and surface water pollution.

.....The state game and fish commissions should be supported for adequate operation budgets. The use of competent advisory committees would be helpful in evaluating programs and securing necessary funds.

.....The OSU fish and game department should continue research with farm ponds to find easier-to-handle and safe, effective herbicides for killing or retarding pond-weed growth.

.....Removal of logging debris from creek channels should be done with good judgment pertaining to the individual situation. Seldom is it advisable to remove all large debris.

.....In the Alsea Basin keeping a partial stand of alder on the streambanks of creeks, where possible, should be practiced. This will provide shade and reduce erosion. As there shade trees mature and hang out over the stream, they should be partially cut and removed in a manner that will allow new trees to take their place.

.....A program of reducing trash fish in the Willamette Basin streams needs to be carried out. Periodic seining of trash fish below dams in the Long Tom River is recommended as a trial program. Trial programs of killing trash fish in smaller streams and replanting to trout immediately afterwards should be carried out for five years to evaluate the practice fully.

.....Research with rainbow trout in the Willamette Basin streams needs to be pursued. The various hatchery programs for migratory salmon and trout have made great strides in the last 15 years. They can continue to improve. The Willamette Basin can be developed like some coastal stream fisheries.

.....Spawning beds of the Alsea River should be protected as much as possible.

.....The Oregon Fish Commission should be urged to release silver salmon smolts at various locations on the Alsea River system to improve fish distribution.

.....Jet boats or other motor-powered boats for sportsman use should be prohibited above Cox Creek on the Alsea.

.....Publicity on steelhead fishing for other rivers will help reduce pressure on the main Alsea River and north fork tributary.

.....The sportsman must be self-educated or otherwise educated to respect the rights of people and all classes of property. The mere acquirement of public access to a lake or river does not mean the sportsman does as he pleases on the shores of rivers and lakes or on the way to these waters. Even publicly owned land requires certain restrictions and conduct, such as a reduction of pollution, cutting of trees, burning, and vandalism of facilities. Those using such accommodations must adjust themselves to good conduct. Access problems prevail in the entire county. Various groups need to promote, encourage, and educate for the good conduct of sportsmen. Public access in the Willamette River bottom to some lakes may be demanded in the future by the public. Landowners who own the lakes on their shorelines restrict access for three reasons: the number of people they would have to accommodate, garbage, and property damage and liability.

.....A strong predatory animal program should be conducted in the county. Predators are never completely eliminated and if left uncontrolled multiply rapidly. Benton County experienced a heavy predator buildup in the late forties and early fifties when the control program was inadequate. Some of these programs will need to be publicly

funded. Other control programs may be handled by private landowners.

.....The committee believes any legislation removing cover one-half mile back from streams should be carefully reviewed. Such legislation does not seem logical, necessary, feasible, or a wise use of resources.

.....Boat launching and access areas now in existence and planned for by the forest service and BLM on the Alsea should be developed as funds become available before any additional acquisitions are made from private ownership. Most of the shoreline is already available to the public. The county should not vacate any more public roads leading to the Willamette or Long Tom rivers.

.....The game commission has done an outstanding job of managing deer resources in the area, and the committee sees no need to change commission policies.

.....A program of providing more winter feed and cover for pheasants should be developed as soon as possible.

.....The committee requests the following with the 1968 gun law enacted by Congress: (1) regulations and administration can be made simple and uniform to reduce administrative costs; (2) it appears the regulation agency has already gone beyond the intention of Congress, which should take steps to repeal the law; (3) the new gun law can be a step to-

wards removal of firearms from the people, a step which would jeopardize national defense and constitutional rights;

(4) the Oregon State Legislature should not enact additional gun laws because they would create additional expense and burdens on local and state agencies, plus added confusion unless they combine 80 laws pertaining to guns in Oregon. A study committee would be in order.

Committee Members

Bob Urban, chairman
S.A. Jackson, secretary
Bennie Hockema
Ernie Walter
Paul Ludlow
Jim Turner
Harold McCallum
Howard Ball
John Berklund
Laverne Johnson
Virginia Rankin
Dr. E.G. Quisenberry
Charles Bruneau
Paul Vroman

Forestry Committee Report

Forest industries of Benton County have long been of economic importance. They contribute about \$30 million annually of the county gross income, which is about 45 percent at present. For the Corvallis area, which includes some area outside of Benton County, forest industries account for 75 percent of the business, according to USFS research.

Improved markets for various products and additional methods of log utilization have improved economic returns. Through various standard, modified, new, and introduced manufacturing processes, wood has been able to keep step with other materials and will continue to find its way into new uses for pulp, furniture, packaging, and special materials in the world economy.

Forest industries in 1968 provided employment for an estimated 2,000 people, an increase of 300 people in the last 10 years. In 1968 there were 11 conifer sawmills, 2 alder mills, 10 planer mills, 2 veneer plants, 3 plywood lay-up plants, 1 shake mill, and 4 other processing plants operating. A pressed shaving plant is scheduled for construction in 1969. The estimated log production amounted to 90,299,000 board feet. Not all logs produced were milled in Benton County. Logs for processing in Benton County came from Benton, Lane, Polk, Lincoln, Linn, Coos, Clackamas, and Marion counties.

A reduction in the number of mills has been occurring for the last 15 years. Remaining mills have increased their efficiency and capacity. At present there is a scarcity of logs partly evidenced by the high price of stumpage.

New uses for wood and new processing methods and greater marketing of some timber for pulp may alter the forecast or trend.

Bark is one of the major problems today. Much of it is used for hog fuel, but some is burned. The industry is exploring various uses for bark, including wider use for agricultural purposes.

OWNERSHIP

Benton County must keep in mind that a certain pattern of ownership change could affect the economy and tax base of the county adversely. Everything possible should be done to avoid such an occurrence.

Nearly all private land logging and sawmilling and much of the plywood industry are controlled and operated by local people. If this ownership is sold to some people in the industry, our timber supplies could be rapidly liquidated. This movement would mean unemployment for many local residents and bankruptcy of many secondary manufacturing plants.

The productivity of forest lands is based on soil depth and composition, slope, aspect, climate, drainage, and elevation. Land is classified into sites of which there are Sites I, II, III, IV, and V. About 75 percent of our land is classed as Site III and low Site II.

Average yield of fully-stocked stands, Scribner, at 50 years of age is as follows: Site I -- 45,000 board feet; Site II -- 28,000 board feet; Site III -- 15,000 board feet; and Site IV -- 5,000 board feet. (Information from USDA Technical Bulletin 201, 12" DBH and over.)

Annual yields of full-stocked stands of Douglas-fir in Benton County vary considerably and usually vary from 400 to 1,000 board feet Scribner per acre after the age of 40 years.

Forest Ownership and Volume of Merchantible Timber in Benton County

| Owner | Acres | Board feet |
|--|----------------|--------------------|
| City of Corvallis--Marys Peak Watershead | 1,720 | 40,000,000 |
| US Forest Service & O&C controverted | 15,806 | 710,000,000 |
| Oregon State University: McDonald Forest | 6,761 | 108,500,000 |
| Dunn Forest | 6,240 | 29,175,000 |
| Bureau of Land Management (O&C) | 51,710 | 1,800,000,000 |
| Public domain | 5,757 | 200,000,000 |
| State forests | 9,393 | 130,660,000 |
| Private | <u>155,000</u> | <u>800,000,000</u> |
| Totals | 252,387 | 3,818,335,000 |

The data were obtained from various public agencies, including the State Tax Commission. Timber volumes are on a basis of 16' Scribner Scale. The total merchantable timber increased in the last 10 years because of our reforestation program.

LAND SURVEYING AND CORNER BOUNDARY MARKERS

Forest land surveying is costly. It is quite common for one surveyor to make a survey that is changed by the next surveyor, and then a third survey may even change the boundaries and corners to some extent. This can be confusing and lead to penalties for the landowner and forest operator. A court case settles the issue for the time being, but it may be reopened. Some study should be given to determine a means whereby a final survey can be established.

Corner markers and bearing trees or objects are often destroyed or rot away or are broken down. Corner markers and reference objects should be made of some permanent material that is not easy to destroy and then described in the survey notes and recorded in the courthouse. Some early Benton County surveys are not on record in the courthouse.

We realize it is difficult to select materials suitable to identify corners in some areas properly. Trees serve a certain span of years but are not too permanent. Frequently a timber faller will cut down a bearing tree. It is desirable for landowners to keep their corners and boundary lines well marked and defined. The use of metal tags is quite popular today, but they have their shortcomings. Metal tags will deteriorate with exposure to weather and rifle bullets. They are placed on live trees with nails, and even when some expansion is allowed the tree grows and eventually bursts the nails out of the tags and the tag falls to the ground and cannot be found.

MANAGEMENT OF PRIVATE FOREST LAND

Several methods of improving privately owned forest land would increase the total annual board-foot production per acre and provide more timber to the forest industry.

Financing

A greater understanding by lending agencies, landowners, and loggers is needed to reduce premature harvesting of stands. Cutting of immature timber is one of the serious problems in the northwest today. Everyone concerned will perform a great service if he can reduce this practice. ASCS federal cost sharing practices can be of financial aid to the small-forest tract owner.

Reforestation

Our committee urges owners of forest land to establish a new crop of trees as soon as possible after logging. This may be accomplished by these methods: (1) Leave a few seed trees per acre over the logged area. (2) Scatter seed on the area and poison for rodent control. (3) Plant trees. At present the ASCS program pays 50 percent of the cost of tree planting up to \$1,000 per operator. (4) Perform spec-

ial tasks such as controlling competing brush and grass by use of chemicals.

In addition to the logged-over area there are about 10,000 acres of open grassland and cropland in the lower foothills that will probably return greater annual revenues per acre of timber over a long period than if used for pasture or crop production. Approximately 8,000 acres of this land has been converted to forest use in the last 12 years. In the river bottom areas and some of the extremely wet lands in the main valley floor of Benton County, cottonwood and Oregon ash offer good possibilities for making good annual returns. A well-stocked stand of cottonwood will produce 1,200 board feet per acre annually. White fir, hemlock, and cedar in minor mixtures have a proper but neglected place in reforestation: Cedar may become a scarce item. In establishing new stands of timber it is desirable to have even-aged stands to reduce management problems. The areas of understocked timber vary with ownership. In Benton County the USFS has stocking of over 60 percent on all of its lands with conifers. BLM claims to have about 5,000 acres under 60 percent stocked. The state has 2,821 acres under 60 percent stocked. OSU has 1,000 acres that need to be better stocked. Private land is about 30 percent understocked. All owners are making an effort to put their land into greater production. To achieve full production is no easy effort. It requires time, money, labor, and equipment. The job has to fit into a multitude of plans and conditions. It is impossible to achieve and keep 100 percent stocking on a large area because of disease, fire, animals, wind, ice, snow, insects, and competing vegetation. A good level at maturity is 85 to 95 percent stocking. As a general rule, the 75 to 80 percent of full stocking remains at maturity.

Livestock and Trees

The grazing of livestock on forest lands can be permitted providing the stockman is careful about time of grazing and does not overgraze. Overgrazing is a common practice on forest land that has interim use possibilities. Young trees are often killed and others badly damaged. One example of livestock damage is in the Beaver Creek area. Trees were not exposed to grazing on one side of the fence and are now 30 feet tall. On the other side, where overexposed to grazing, they are less than two feet tall. Both plantings were made in the spring of 1957. Deer damage on some tracts has been heavy in recent years. The damage seldom kills the trees but often deforms them so that they do not make good forest trees. Deer-damaged trees are slow in making recovery. One of the goals in tree growing is to keep the land fully stocked with trees.

Fire Protection

Local operators, fire protective associations, private landowners, USFS, and the state are to be commended on the excellent fire protection programs they are conducting. Relaxation in the fire protection programs should never occur. Suburban people in or near forest land should be extremely careful about fires of any kind on their property. The Mt. View area is an example where forest land is heavily populated with homes. A serious fire could develop into a forest fire in that area and could also wipe out many residences. A number of railroad fires are started each year west of Corvallis. They result in damage to fields and for-

ests. We urge the railroad people to develop devices which will eliminate fires starting from railroad engines or brakes. It is further recommended that protective associations advise the owners of any snags, bug-killed, or diseased trees in order to prevent this fire hazard from developing.

Pruning, Selective Thinning, & Low Stumps

Tree pruning of 15-30 year old stands of Douglas-fir to a height of 9-15 feet from the ground will increase the amount of clear material in the butt logs when they are harvested. There is some question as to whether this is economical. With the extreme demand on our forests for logs, it is foreseeable that very little clear wood will be available in the next 45 years unless we take some steps now to try and produce it. Keep these points in mind when pruning: (1) Do not remove over one third of the live crown. (2) Avoid over-exposure of tree trunks to hot sun and wind. (3) Prune crop trees to about 80-120 per acre (15-18 foot spacing.) (4) Prune flush with the stem. (5) Prune in winter and spring to reduce less problematical disease.

Thinning. Under some conditions the logging practice can be started on 25-year-old Douglas-fir stands and used up to 100 years. Extremely rough, rocky ground is not best suited for selective logging. Healthy, well-formed, dominant and codominant trees should be left rather than removing all of the large-sized trees and leaving the small ones. The large trees are the money makers. This practice is known to have produced twice the accumulated board feet per acre compared to allowing nature to take its course and then clear cutting. There are several degrees of thinning that may be used in Benton County. This will vary with the kind of stand, the height, and several other factors. Everyone planning to thin or who is associated with the process should continue to learn more about the end results in addition to mechanics of thinning. Logging costs are slightly more per thousand for thinning than for clear cutting.

Cutting low stumps. Cutting stump heights at almost ground level has become a uniform practice and should be continued with very few exceptions because it increases the recovery per tree and reduces breakage and other waste.

Prelogging

Where old growth stands are to be clear cut, prelogging of snags, down trees, and understory trees under 20 inches in diameter many times increases the harvested yield per acre by 6,000 to 10,000 board feet. Logging in the remaining stand is easier and faster. There is also less fuel left on the land to be disposed of in slash burning when an area is final cut.

CHRISTMAS TREES

The longtime outlook for Christmas trees appears good for high-quality trees. Three thousand acres are now devoted to Christmas trees. Most of these trees are Douglas-fir. However, there is some demand for noble and white firs, Shasta and Austrian pines, redwood, and some cedar and spruce.

Plantings have been successful on nearly all types of land except where the drainage is poor. Soils producing one

foot of annual growth do not leave much of a pruning problem, but they do have drawbacks for establishing stands. Where annual growth is 18-36 inches a well-timed pruning and shearing program must be used to produce trees of high quality. Christmas trees have been successfully harvested while establishing a forest stand. The operator should know the techniques if this method is used. New advancements in handling are being developed at all times, and Christmas tree producers with any sizable planting should keep familiar with these changes. Holding labor cost down must be considered by all producers.

Recommendations

Christmas tree production and marketing is a specialized business. Growers need to know about markets. The committee submits the following recommendations:

.....The Extension Service should prepare a growers' list annually.

.....The use of state markets must be expanded as our supply of marketable trees becomes greater.

.....Christmas tree grades should be used.

.....Oregon State University should continue research on marketing of Christmas trees and loss and damage in interstate shipment.

.....The county extension agent should carry on a strong educational program covering the Christmas tree production and marketing methods and problems. New growers will benefit most from this.

.....Much research achievement has been made in controlling competitive grass and weeds, insects, and diseases in Christmas tree plantings. Research and demonstrations work must be continued for better control methods.

.....Christmas tree fertilization for improving growth and quality and genetic work for improving a faster growing and less costly tree are research problems that need to be dealt with for all Christmas tree species in a coordinated program by various agencies and the industry.

.....Growers should adjust shearing techniques to meet the demands of the consumer.

PUBLIC UTILITY RIGHTS-OF-WAY

Public highways and other roads, power lines and telephone lines through forest land consume vast areas. At least 8 percent of the forest land is in logging roads, landings, and public utility rights-of-way. These facilities are continually public utility rights-of-way. These facilities are continually being expanded. This all means less tree-producing land. The trees are the basis for the existence of utility companies and public highways and roads.

Utility companies should give consideration to putting their lines underground. We have no recommendations for the highways and public roads other than to keep them as narrow as possible and not increase them more rapidly than needed and to locate on less productive lands.

The committee suggest that crews limbing trees and controlling brush along the rights-of-way use the correct procedures to keep damage at a minimum.

FORESTRY IN SECONDARY AND ELEMENTARY SCHOOLS

Since forestry makes up a large segment of our state's economy, the committee recommends that all schools add to their curriculum a forestry class for boys and girls and a vocational day for juniors and seniors in high school.

The two-day forestry tour in cooperation with public agencies and private industry should be continued. We recommend that the tour be conducted in Benton County in order to accommodate most effectively the number that will attend and to hold down expenses to the school district. The present tour involved 800 sixth graders and 20 to 25 adult supervisors.

FISH, WILDLIFE AND RECREATION

Most points of importance to the forestry committee have been considered by other committees. For the best interest of everyone, the committee recommends that the Marys Peak area not be classed as a wilderness area. The Marys Peak watershed is being well managed by the USFS. The complete removal of the present stand of timber should come about in a pattern that will keep tree cover on the watershed at all times. Trees are like other living things. They reach maturity, decline, and die. Good conservation is use without economic waste. The old growth should be orderly harvested and replaced with new stands of trees.

The committee sanctions the recommendation of the fish and wildlife planning group that there be no logging roads built up the north fork of the Alsea River adjacent to the stream bed, in order to protect the steelhead and trout hatchery located on the river.

SOIL EROSION CONTROL

Soil erosion control measures suggested for landowners and logging operators are as follows:

-Seed logging road cuts and road banks to grass. Soil will be stabilized after one winter if cover exists the first year.
 -Lay out roads to avoid making large cuts in the slope whenever possible.
 -Use shallow diversion channels on the roadbed at necessary intervals.
 -Lay out a road system with the lowest amount of grade possible.
 -Keep the roads as narrow as possible. This also helps keep more land in production.
 -Put logged areas back into trees as soon as possible.
 -Construct bridges and culverts of adequate size.
 -Avoid logging in or across streams.
 -Remove some debris from streams when through logging. This should be confined mainly to the extremely large material.
 -Avoid winter logging on soft, deep soils.
- Water causes the greatest amount of damage. Erosion cannot be entirely eliminated. It has always existed.

MCDONALD AND DUNN FORESTS

Since 1957 an excellent job has been done by OSU, and the logging contractor in managing the McDonald Forest and Dunn tract. The area is a mixed-age Douglas-fir forest.

The entire 13,000-acre has been selectively logged once. Some areas have been thinned three and four times. In older stands the second thinning will be used in some areas to develop shelterwood stands. Many maple areas have been chemically treated.

It is recommended that longtime contracts with an individual operator be made with terms agreed upon.

COUNTY EXTENSION PROGRAM

The established forestry demonstrations should be continued for many years. The date and experience from these demonstrations will greatly aid our forestry program for the new crops of trees. The data should be summarized in a brief document.

Timely tours and meetings should be included in Extension's annual program of work. New equipment and methods can be observed in such activities.

Fertilizer demonstrations with Douglas-fir for Christmas trees and forest trees should be continued.

TECHNICAL SERVICE AND EDUCATIONAL PROGRAMS

The development of forest landowners and logging operators as good foresters should be encouraged. Much headway has been made in the last 10 years. Many operators and owners have achieved a good status by experience, observation, and being able to learn to work things out.

Capable, private consulting foresters are available. Technical foresters are available from the state forester's office and extension service through the county agent.

Tours and meetings and circular letters offer valuable information about forestry.

MOUNTAIN WATER FOR MUNICIPAL USE

A complete study of Benton County forest areas for city water supplies should be made to plan for expanding water demand. Cedar Creek, West Wood Creek, Scheele Creek, Parker Creek, Upper Marys River, and Wells Creek offer good possibilities.

BRUSH CONTROL

The hardwood species of alder, bigleaf maple and vine maple, and occasionally salmonberry and thimbleberry are quite competitive when new stands of forest trees are being established on about 100,000 acres of our forest land. Slash burning and use of chemicals are about the only economical methods for controlling brush on any sizable area today. Where heavy growth of salal and other small brush is too dense for reforestation, spring burning and artificial seeding and transplanting of such areas may be required to establish new tree stands. Immediate reforestation often reduces the brush control problem.

It will require large sums of money to control brush and reforest with conifers in northwestern Oregon. Siuslaw National Forest has 160,000 acres mostly covered with alder. It cost the State Forestry Department \$106 per acre to regenerate 15-year-old brush with Douglas-fir. The forest industry should make every effort to educate the public about the necessity of brush control and to protect the use of brush-control methods. A billion board feet could be produced annually on northwestern Oregon private land now in hardwood and brush species if this land were in conifers.

SLASH BURNING

Slash burning is a highly debatable subject today with the general public because of air pollution.

There are four basic reasons for slash burning: (1) prevention of spread of accidental fires, (2) preparation of site for reforestation, (3) inhibition of hardwood species competing with commercial timber species, and (4) compliance with state law and partial relief for the landowner and operator from the liabilities and responsibilities.

Slash burning should be carried out in accordance with burning regulations to prevent serious damage to the soil but must be effective enough to accomplish the purposes of burning.

We believe completely outlawing slash burning would be a serious mistake. The amount of fuel for slash burning will be greatly reduced in the future, and sometime the need may be eliminated when second-growth timber is harvested. There will always probably be some need for slash burning on the west side of the Willamette River and along the coast.

TIMBER TAXATION

Timber is a crop, but unlike other crops of the soil it takes 60 to 100 years to harvest. Some income from thinnings may start, on the better sites, at around 35 years.

When a crop is taxed 60-100 times before harvesting, it needs tax laws that provide for this load. Oregon has four tax laws: (1) The Forest Fee and Yield Tax law was passed in 1929 when thousands of timberland acres were several years tax delinquent. It was designed to put these acres back on the tax roll. (2) The Small Tract Timber Law was designed to help the small owner and is supposedly based on site are so high that an owner may, at least to start with, pay a greater tax than if he remained on ad valorem basis.



A study established in a 20-year-old Douglas fir stand near Hoskins by Oregon State University in Site II, land owned by T. J. and Bruce Starker. The first cut in 1963 radically thinned

The law also has two other poor features: one is based on blood relationships, and the other based on a 1,000-acre limit in order to be eligible. (3) The Wester Oregon ad valorem tax is an attempt to influence the larger owners to get on a sustained-yield basis for at least 30 years. The State Tax Commission each year sets a new value for both the land and the timber. It uses largely as a basis sales from public agencies, which often give an unrealistic value. (4) Eastern Oregon has a severance tax. There are many arguments against a severance tax, but because it takes a long time in that area to produce a 12-inch tree, it may be justified.

A few tax features compared with other properties might be in order: Timber is the only crop of the land that is taxed. Seed and grain crops are exempt. Cold storage apples and pears are exempt, but cold decked logs are taxed. These same logs could have been taxed 60 times already as standing trees.

The inventory tax is said to be an unfair tax, and methods of repealing it are in the hopper. The stores dealing in appliances turn them over five to six times per year. Bread turns over 365 times in a year. Timber turns over once in 60 years. If the inventory tax is unfair, then a timber cruise should be the first to receive relief.

Anyone interested in timberland investment should consult his compound interest tables. A dollar invested today must earn double its value in 12 years if 6 percent is used in 9 years if 8 percent is used.

Many people have the misconception that a "tree farm" is a tax gimmick and gets special treatment. It probably does from the State Tax Commission, since a tree farm has to live up to certain requirements and may be better managed than some lands and has to pay a higher tax rate. A definition follows: "A tree farm is a privately-owned, tax-paying forest property which has been accredited, in this area, by the Industrial Forestry Association and which is dedicated to perpetually produce a timber crop."

Committee Members

| | |
|--------------------------|-----------------|
| Bruce Starker, chairman | Paul Goodmanson |
| S. A. Jackson, secretary | Homer Hull |
| Marvin Rowley | Wade Howell |
| Richard Parker | T. J. Starker |
| H. L. Schudel | |



the stand from over 1,700 trees per acre to 340 trees. The growth in diameter for trees on the thinned plots has been more than double that of the unthinned.

Soils, Irrigation, and Drainage Committee Report

Soils

As farming becomes more intensified and competitive with less margin of profit and more of our soils used for nonagricultural purposes, soil management needs more attention. This area includes soil testing, soil survey work, soil fertility, soil erosion, and urban use.

SOIL TESTING

Many farmers and urban home gardeners are using OSU soil tests to make fertilizer applications. The more intensified the crop, the more apt the producer is to use a soil test. The number of samples from Benton County tested at the OSU soils laboratory has tripled in 12 years time. Vegetable, mint, and berry producers should have each field tested every year. New alfalfa and pasture seedings should have soil tests. Grass seed and cereal grain fields should be tested every three years. A soil test serves as a guide in making better fertilizer recommendations and use. Soil tests are an aid in better spending of fertilizer dollars.

SOIL SURVEY WORK

The first soil survey was completed in 1920, showing 32 different soil types. The maps are out of print and supplies are exhausted. Soil survey information is used to produce and select crops for certain soils, drainage construction, road and building construction of all kinds, sewage disposal, forest tree production, and other soil uses.

For several years the USDA Soil Conservation Service in cooperation with Oregon State University has been making a detailed soil survey report for the county. More than 50+ basic soil types have been identified. Field and classification work will be complete in 1969. All land in the county is included in the survey. The Alsea Basin survey will be published separately. Publication dates are indefinite. Publication should be completed as soon as possible.

SOIL FERTILITY

Most Benton County soils are in need of lime in amounts from one to six tons per acre for good production of many crops. Wet soil types are usually quite acid, usually very low in phosphorus, and often low in potassium and sometimes magnesium. Hill soils are quite acid, very low in phosphorus, and often low in potassium and possibly magnesium. Heavy hill soil types are not excessively acid and have a good level of potassium unless the field is new cropland.

Benton County farmers used about six million pounds of nitrogen, two million pounds of P_2O_5 , and three-fourths million pounds of K_2O in 1968. Generally, all crops except dryland pastures receive abundant amounts of commercial fertilizer. Benton County farmers spent more than \$1 million for commercial fertilizer in 1968.

Continued emphasis needs to be placed on coordination of soil tests and fertilizer use with research and demonstration work. Research and demonstration work on the farm needs to be continued on a cooperative basis between producers, people in industry, and the OSU Experiment Station and Extension Service on a large number of crops.

Maintenance of soil fertility is influenced by the presence of organic matter as well as chemical content of the soil. Farmers should continue to use cover crops, crop residue when feasible, crop rotation, and barnyard manure to maintain and build up soil organic matter.

Manure preservation and use is of importance for improving soil fertility but also for reducing water and air pollution. The time has come when manure must be handled to keep water pollution at a minimum. The total amount of manure in the county now is much less than it was 20 years ago because of less poultry and livestock, but the manure is in much greater amounts where it is produced because of larger herds and flocks per operating unit.

SOIL EROSION

Throughout this report the emphasis has been upon the improved use of water and soil. Every effort must be made to prevent soil erosion. Even though farmers cannot stop erosion 100 percent, they can follow a soil-management program that will hold it to a minimum. Soil conservation practices should be performed in a manner to avoid economic waste. Some of the recommended soil management practices are as follows:

- Build up and maintain organic matter by turning under crop residue and by using perennial grasses and legumes.
- ... Seed extreme problem areas to permanent cover and leave it there. This recommendation includes newly logged areas and logging roads.
- ... Seed fall crops in September and early October.
- ... Construct and maintain proper drainage and sod waterways.
- ... Use commercial fertilizers and barnyard manure for better growth.
- ... Produce legume and grass-seed crops and perennial forage crops.
- ... Prepare proper seed beds to insure good stands of grasses and legumes.
- ... Plant forest trees.
- ... Use cover crops on annual cropland.

URBAN EROSION

The problem of soil erosion for many has been associated with rural areas only. It has become evident that erosion can be a serious problem in suburbia. Although ignored

for years, the conservation lessons learned in rural areas can now be applied in increasing measure to urban and suburban lands.

The "new conservation" is where the people are. It involves their land, trees, grass, and streams that meander through suburbia. It also involves eroding soil, muddy sediment, seeping septic tanks, and a myriad of related natural resource and environmental problems generated by the urban upheaval.

The fundamental problem of preventing erosion, sedimentation, and flooding originates with the development of land, including highway construction. Most erosion in urban areas occurs during the construction of homes, shopping centers, schools, highways, and other facilities. Thus, the solution to the problem is to convince builders, developers, individual homeowners, and the planners and designers who work for them to adopt proper conservation techniques and procedures. The experience gained in rural areas clearly indicates that most of the resource damages resulting from accelerated soil erosion, flooding, and sedimentation can be prevented or minimized if basic conservation procedures are followed.

The committee recommends that all urban developers, planners, and designers know the soil they are working with and its hazards, limitations, and capabilities. Then use the soil within its capabilities and apply basic conservation practices to minimize its hazards and limitations.

With a fast development in the hill area for residential areas, particular attention should be paid to the possibility of landslides. Landslides have occurred in these areas before, and poorly planned developments increase landslide potentials.

SUBURBAN AND RURAL RESIDENCE SOIL PROBLEMS

Proper management of soil for various uses by homeowners in town and by occupants of rural residences is important to avoid many problems in gardening, construction, drainage, excess moisture in homes, sewage, and domestic water. Some common problems are: working soil too wet; using inadequate drainage around buildings; planting unadapted shrubs, trees, and plants on certain soils; and constructing buildings on heavy, wet soils as on other soils. Another concern is not knowing how to water lawns and yard flowers and shrubbery on certain soils. Also, some soils heavy concentrations of housing on more than the minimum requirements specified by sanitarians may lead to water pollution.

Developers and rural homeowners need information about soils for the various uses they are put to in order to reduce later extra costs, failures, and faults difficult and expensive to correct later. Basic knowledge of local conditions for homeowners would also reduce later public fund requirements to help make corrections.

The OSU Extension Service and SCS should develop a stronger, broad soils education program coordinated with other public agencies and private industries. Soils change very slowly geologically. With a rapid expansion of population and uses for industry, homes, schools and roads the soil use and management problem becomes more complex and the need for knowledge of soils becomes greater. Grandpa was home educated to a large degree because he was next to the soil. Junior is next to the concrete today and does not think about the soil until he is "stuck in the mud."

Irrigation

Benton County farmers irrigated an estimated 16,000 acres in 1968, or 17 percent of the county's cropland. Six thousand of these irrigated acres have been added since 1958. Much of the growth in irrigated acreage is paralleled by the increases in horticultural crops and essential oils. These crops account for almost two thirds of the irrigated acreage.

Most of Benton County's croplands are suitable for irrigation, although the heavy soils and steeper slopes will require special treatment and practices. The total annual natural supplies of water are almost all used during the irrigation season in much of the county. The major part of the unirrigated lands lying in the Long Tom and Willamette river flood plains or immediately adjacent can be irrigated by developing shallow wells or from reasonably close surface sources. Elsewhere in the county all of the streams are overappropriated. Ground water in irrigation quantities has been found in only a few places away from the flood plain. Deeper wells hold little promise. Some wells as shallow as 100 feet produce water having plant-toxic levels of salts.

Increases in irrigated lands will continue and can be expected to be closely related to horticultural crops. Individual irrigation developments on the Willamette and Long Tom flood plains will probably supply much of this growth

until all of the flood plain lands are irrigated or in an irrigation rotation.

IRRIGATION PROJECTS

Most of the growth in irrigation away from the Willamette and Long Tom flood plains will come through the development of irrigation projects. The first two of this type of irrigation development are under way. The Hulbert Lake project initially designed to irrigate 2,600 acres in Lane and Benton Counties began delivery of water in 1969. Muddy Creek Project, now in the organizational stages, hopes to begin water delivery as early as 1971 to an eventual 2,000 or more acres. Both of these developments will purchase water reserved for irrigation use and stored in the Fern Ridge Reservoir.

Landowners interested in developing group projects can obtain planning and information assistance from the Extension Service. The Benton Soil and Water Conservation District can also give valuable help in planning and technical areas. Extension should give priority to helping new irrigation projects throughout the development period.

Among the kinds of help needed by landowners in group projects as well as the landowner of an individual irrigation development is current information on the costs and

returns of irrigated farming. The decision to irrigate is particularly important to the project irrigator because the project costs are in addition to the on-the-farm irrigation costs. Research and information should be current on local irrigation costs and returns from different types of crops.

CONCERNS

It is believed that many irrigation wells are operating significantly below their potential efficiency in terms of quantity, silting, and drawdown. This problem should be explored to determine its validity and extent. Well owners should be provided with information that will help them determine the efficiency of their wells, improve this efficiency if possible, and avoid inefficient wells in the future.

Pipe moving is becoming more of a labor problem, particularly in tall crops such as corn. Studies should be undertaken to explore the feasibility of alternative approaches to the problem. Alternatives should include skipping rows, rototilling a pipe strip across rows, planting a low-growing horticultural or field crop in alternate strips, and exploring other innovations that could reduce labor difficulties of hand moving pipe in corn.

Horticultural leaders say one of the biggest opportunities for improving yields and quality of horticultural crops is by improved irrigation programs. Adequate evidence is

available to support the claim of poor irrigation designs and poor operational programs. Farmers need to understand more clearly the costs of poor irrigation and irrigation system designs; they also need to be able to measure and evaluate their own systems each season they are set out. While most farmers generally understand these problems, they often fail to accord them the importance deserved. The Extension Service should establish continued programs to improve irrigation practices.

Moisture-measuring equipment has been available for a number of years and recommended to measure moisture levels for irrigation schedules. Moisture-measuring programs have not been generally accepted for various reasons.

Even though moisture-measuring equipment is not widely accepted or used, its value and need will continue to increase as cropping intensifies. The equipment can be of particular value to the inexperienced irrigator and for the farmer growing new crops. Moisture-measuring equipment can be of most value to farmers having well-designed irrigation systems that have high uniformity of application and capacity.

Research should be continued on moisture-measurement control systems that will predict moisture conditions in specific soils and crops from centralized measuring devices.

Drainage and Flood Control

Benton County has 6,000 acres of cropland benefited by tile. Permanent open ditches are aiding drainage on another 25,000 acres. Thirty-five thousand acres of additional cropland would benefit from tiling, new or improved open ditches, and land shaping. Drainage on 5,000 acres of grazing land is needed.

It is recommended that farmers continue to improve land drainage. Tiling is very effective.

Assistance to farmers under the ASC program should be continued. Planning help for the tiling job on a farm is available through the ASCS program, the SCS, and the extension service.

It is recommended that clay tile be used over other kinds of tile because of its long durability and service. Clay tile systems have been in operation 90 years at some locations in this county and are still in good shape.

Tiling should be done only after a complete farm drainage plan has been formulated. A record or map of the installed drainage system should be kept on each farm for future reference by owner or operator.

Open ditch maintenance to control grass, rush, and brush must be carried out periodically, or such drainage ways can become clogged in 15 years' time.

There is question about the economy of draining heavier soils such as Cove, Wapato, and Dayton series. Tile line spacing will have to be close and therefore will be expensive. Extensive drainage of these soils with lie seems to be feasible and will be more so in the future.

Improvement of outlet ditches and streams for drainage is needed. Information is needed on the costs of sump

pump removal of water from tile drainage systems lacking gravity outlets. At present there are about 40 miles of improved trunk ditches, including small stream channels, in the county. At least this many additional miles are needed. All ditches need to be properly designed and built. Particular attention should be paid to the depth and slope of the sides to provide sufficient capacity and reduce bank erosion.

WILLAMETTE BASIN PROJECT

The committee favors further development of the Willamette Basin for flood control, power, storage of water for irrigation, industrial, sanitation, recreation, and fish and wildlife purposes. The State Water Resources Board has established minimum flows, for public good, on the Willamette River and all its major tributaries flowing in Benton County. No enforcement of these minimum flows has occurred to date. None of the waters of Benton County have been adjudicated. Adjudication of surface waters is needed as a basic procedure before clear legal distribution of the rapidly decreasing supplies of surface water can be undertaken as provided for in the state water laws.

Bank Protection on the Willamette River

Benton County has 23 revetments built by the U.S. Army Engineers to eliminate erosion at certain locations. First construction started in 1938. The average cost of these is about \$30,000. The Long Tom River channel was improved downstream to Bundy Bridge in 1944. Several miles north of that point still remain unimproved. A cutoff channel operates between the Long Tom and Willamette just north of Bundy Bridge.

There are seven more locations needing bank protection immediately, plus some extension of existing revetments.

Federal bank protection appropriations amount to only \$300,000 annually for the Willamette Basin. The committee recommends that Oregon's congressional delegation take steps to triple that amount.

Bank protection provides benefits far in excess of the cost. Our congressmen should introduce legislation to make maintenance the responsibility of the federal government rather than local sponsoring groups. Local groups might have much difficulty financially in living up to the present maintenance clause in the partnership agreement.

The bank protection program is scheduled for termination in 1970. The committee urges all groups and our congressmen to work towards extending this program for another 20 years.

Long Tom River

Improvement of the Long Tom channel from north of Bundy Bridge to the Willamette is recommended to reduce flood damage occurring to 6,000 acres on the west side of the Long Tom channel and make discharging of water from the Fern Ridge reservoir easier at flood periods.

Flood Water Discharge from Reservoirs

Land in the Willamette River bottom has suffered damage by discharge waters from upstream reservoirs during winter months. Discharge water has frequently covered the extreme lowlands for lengthy periods.

The water level kept just below flood stage has increased bank erosion. Landowners are of the opinion that immediately after a flood, stored water should be discharged rapidly for two or three days and then allowed to drop down to a safe, low level.

Marys River Basin

The Marys River Basin covers a watershed area of 300 square miles and empties into the Willamette River at Corvallis. There has been interest and study of development for flood control, drainage, irrigation, watershed use, reduction of downstream pollution, fish and wildlife, and recreation.

The Willamette Basin Task Force . . The task force is presently making a study of the Marys River Basin. It appears as though a large reservoir at the Tum Tum or the Harris or the Philomath locations may not be feasible.

Upper Marys River at Summit . . It is badly in need of channel clearing and cleaning. Low check dams may be required with proper fish ladders to impound water for summer use and protection of fish life.

Greasy Creek . . There are no plans for improvements on this stream. However, it does need bank protection work. Small reservoir sites could be constructed on Greasy Creek to supplement the Corvallis water system.

Muddy Creek. Channel improvement of Muddy Creek has been considered for 100 years. The Muddy Creek drainage area covers 100 square miles. Proposed plans of the Army Engineers in 1949 indicated 16,275 acres initially

benefited and 33,100 acres totally benefited for a cost of \$800,000 (The cost would be much higher now.) Channel distance would be reduced from 39 to 17 miles. There would be 500 ownerships involved. Six farm bridges and seven county bridges would need relocating or widening. Soils that would be benefited are largely Wapato and Dayton. If better drained they would be suitable for higher value field crops. These soils are not suited for fruit production. The higher and better-drained soils such as Willamette, Woodburn, and better Amity in the Muddy Creek basin are suitable for fruit production. Muddy Creek at the valley floor is not a problem from the erosion standpoint. There are some facts which landowners need to consider about Muddy Creek before draining it. Some of them are

.....What is the benefit ratio to the cost?

.....A water control district will need to be organized and operated with powers to assess and tax.

.....Present irrigation and fence systems will need reorganizing.

.....The work must be well done to operate effectively, since a large volume of water travels in Muddy Creek during winter months.

.....Check dam arrangements in the channel will be required to supply livestock, irrigation, and fish and wildlife water in the summer. There is a considerable amount of dead summer storage water in the present Muddy channel.

.....Deed descriptions of certain properties may need to be changed through appropriate legal channels to maintain clear title.

.....If Muddy Creek is improved, lower Marys River improvement would be necessary to avoid extreme flooding in South Corvallis.

.....Fish and wildlife habitat would need to be maintained and improved. This can be done if the project is carefully planned and constructed.

.....Much of the land would be more suitable for irrigation if drainage occurred. Five large trunk line tributary drainage projects have been constructed in the last 15 years. Much of the lateral work needs to be done.

The development of the Marys River Basin should be undertaken only after the local people have studied the various means and cost of doing the jobs, and benefits to be obtained, and it should be completed with the approval of the majority. The U. S. Army Engineers, the Small Watershed Act, the Small Reclamation Project Act, and the Agricultural Stabilization and Conservation program can be of value to the project development. Local people will have to contribute local funds in varying amounts to obtain federal assistance.

Luckiamute River Basin

Benton County is touched by about 10 miles of the main Luckiamute channel in the Kings Valley and Hoskins communities. The area may become involved in the site of a reservoir which, if constructed, would benefit primarily Polk County. Thorough study of the Luckiamute project seems desirable before action is taken to develop the river by Polk County residents. Some alternative sites besides the dam site at Peedee should be considered.

River Navigation

With increased summer flow, the Willamette River could be made navigable to Harrisburg. The committee believes local people should attempt to have river navigation improved to Corvallis in the future so barges can reach Corvallis most of the year.

River navigation offers possibilities for reduced freight rates and better opportunities to market pulp material. Lime, fertilizer, and petroleum costs could be lowered. Highway traffic, which is becoming a more serious problem everyday, could be reduced between Portland and Corvallis.

Summer Stream Flow of the Willamette

The lowest flow recorded to date is 1,800 cfs. This flow should be supplemented from reservoirs to supply at least 3,000 cfs. at Corvallis. Maintaining a desired summer flow will permit wider water usage for all purposes and reduce pollution. The water coming from tributary streams north of Eugene can be kept in much better condition if there are good reservoir systems on these headwaters.

Projecting the rate of growth in the last 30 years, many areas in the Willamette Valley can anticipate a population of three times what they have today by the year 2000. This puts a great pressure on the need for water for a wide variety of uses. Most of that water in the summertime will have to come from stored supplies.

ALSEA BASIN STUDY

The State Water Resources Board has made a study of the water situation in the Alsea Basin and established minimum low flows. This was a very complete and well-done survey. The U'S' Forest Service has completed a vegetative cover survey. The Soil Conservation Service has completed a soil survey. The Corps of Army Engineers is studying the basin for feasibility of multiple purpose reservoirs. The construction of reservoirs will be a necessity sometime in the next 25 years.

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Field Crops Committee Report

In 1968 there were 83,186 acres of cropland devoted to field crops: 14,700 acres cereal grains; 36,400 acres hay and forage crops; 16,253 acres field and seed crops; 2,760 acres miscellaneous specialty and vegetable seed crops; 3,500 acres cultivated summer fallow; and 9,573 acres idle cropland. The 1968 gross returns for the commodities were \$4,140,000.

The horticultural and truck crops for processing and fresh market and certain miscellaneous specialty crops are not included but will be studied by another committee

Crop acreages for 1968 were as follows: cereal grainswheat 11,600, barley 1,300, oats 1,400, and corn 400;

hay and forage crops alfalfa 2,200, clover and clover mix 4,000, small grain hay 400, wild and other tame hay 4,400, corn silage 500, grass silage 900, pasture 24,000? field and seed crops bentgrass 2,105, Merion bluegrass 85, crimson clover 400, red clover 200, common vetch 50, chewings fescue 100, red fescue 965, tall fescue 1,900, annual ryegrass 3,700 perennial ryegrass 2,938, trefoil 30, sudangrass 100, orchardgrass 2,600, other bluegrass 815, and amclo clover 265; miscellaneous specialty and vegetable crops peppermint for oil 2,000 dill for oil 400, vegetable, flower seeds, and bulbs 175, sugar beet seed 185, cultivated summer fallow 3,500, idle cropland 9,573, and Christmas trees 2,600.

General Situation

Cropping programs are changed with economic conditions, changes in demands, and the development of feasible community irrigation demands. Benton County farmers, for a long time, have looked to crops other than small cereal grains to a large degree. Field seed crops of various kinds have been a major item in cropland usage. This area of production has seen many changes. First, it was Austrian peas; then hairy vetch. Both commodities seemed to fall off in yields and price. Much of the hill land area was converted to perennial pastures and forest land use. Areas adjacent to the more populated areas were converted to industrial and housing use. To offset the acreage diversion, more land has been cleared in river bottom areas to maintain a total cropland acreage.

Field seeds and cereal grains are being continually produced by fewer producers. About 40 large operators produce the bulk of these crops. Some operators farm from 2,000 to 9,000 acres of land mostly in small seeds. Much of the land the larger operators farm is rented. These trends are forced upon an area because of economic conditions. Prices of commodities are usually considerably below parity. Some landowners look to other employment and rent land out. Older farmers semiretire. They do not want to invest in larger, more costly, up-to-date equipment themselves and expand their farms. A few landowners were never farm operators but own land for investment or for sentimental reasons.

Who does the farming? Some younger person who, by some means of finance with a large investment in large, modern machinery, and oftentimes the owner of his own seed and grain-cleaning and storage warehouse, rents land. Such an operator may own a portion of the total acreage he farms. The machinery will be the latest. Sometimes he contributes to the invention of new machines. He uses many new techniques. The hired labor he employs is at a minimum, but those people are highly skilled, experienced people capable of doing several jobs with great proficiency.

They command wages comparable to wages earned in other industry.

The commercial warehouse is having problems of survival because much of the production is now being warehoused through farm warehouses. Likewise, herbicides and fertilizer and other supplies are often purchased through more direct channels at lower prices.

Some of our marketing problems or supply of a salable commodity have been not being able to adjust production with demands in Oregon. Field seed producers in particular, have been able to be the sole and major producers of many commodities because they had a goal supported by research and Extension programs of Oregon State University and a commercial seed trade geared to produce seed in a highly efficient manner. Many other areas of the United States could produce many of the same field seeds produced in Oregon, which has no corner on production just because such seeds are grown here.

RECOMMENDATIONS

.The committee visualizes several ways field-crop production may go in a period of years. Greater acreages of irrigated seed crops may develop. The trend in livestock production may reverse itself towards an increased commodity when community irrigation is developed. New varieties and new outlets for crops can always change.

.We cannot continue to rest on present yields of forage production of pasture crops. Increased yields and returns from pastures offer one of the greatest opportunities today - first by fertilizer use, weed control, irrigation, rotation, and greater use of electric fencing.

.Improved cereal varieties are needed.

.The changes and gains mentioned have to be brought about by greater research and educational programs on the part of Oregon State University on a cooperative basis with the various segments of the industry serving agriculture and other government agencies. The general public must be made aware of the bargain they can get for spending their tax dollars for the mentioned programs and the more specific items outlined in this report.

.....The committee suggests that we avoid a complacent position in the production of field crops. Growers and the trade must continually analyze their position as a group, recognize their problems, and seek a solution.

.....Programs of other government agencies such as Agricultural Stabilization and Conservation Service, Soil Conservation Service, U.S. Forest Service, Bureau of Land Manage-

ment, State Department of Agriculture, and State Forestry Department must be considered and explained. They offer solutions in part to some marketing problems, production problems, and have market outlet potentials for seed production and forage improvement.

.....Field seed producers need to keep supplies adjusted to demand as nearly as possible.

Cereal Grains

Prices of cereal grains have been low for several years: wheat, for example, 50-55 percent of parity. It takes a 60-bushel yield of winter wheat to equalize expenses. Poultry and livestock feeders want lower priced grains. Nationally, supplies of cereal grains have been on the surplus side. Various export programs to foreign countries have relieved the surplus but not enough to strengthen prices. Most grain production in the United States is not utilized for livestock feed. Oregon is a deficient market beef state and also has become a poultry deficit state. To boost livestock feed consumption in this state, it is necessary for either the livestock and poultry products to sell for more money or to produce more grain per acre at a price favorable to feeders who operate on an efficient production program.

No satisfactory winter grain varieties or spring grain varieties are suitable for wet lands. Yellow dwarf virus is

a problem with spring grains. Rust affects some varieties or winter wheat like Gaines. Winter oat varieties are practically the same as the ones we grew 50 years ago. Two gray winter oat strains - - Support and Crater - - have been introduced by Oregon State University. A real high-yielding, hardy winter barley variety is lacking. Smut in field and sweet corn is becoming a problem. A high-yielding, early maturing corn variety is needed.

RECOMMENDATIONS

Oregon State University should develop the following:

.....Higher-yielding, disease-resistant winter wheat, winter oat, winter barley, and spring grain varieties.

.....Cereal varieties highly suited for set lands.

.....Early-maturing, smut-resistant field and sweet corn varieties that have suitable market qualities. Field corn maturity date should be September 15.

Weed Control

Much educational and research work has been done with weed-control chemicals in Oregon. The uses of various herbicides for weed control have been expanded and first used in Oregon, such as the control of weedy annual grasses in cereal grains, legumes, and perennial grasses with IPC, karmex, simazine, atrazine, hyvar, and promotone. The same is true with other herbicides for control of many other weed.

Weed control is a never-ending national problem with much localization of specifics. The committee has identified several major weed problems that must be dealt with by landowners and operators on a more intensified basis. They are quackgrass, wild garlic, tansy-ragwort, morning glory, barnyard millet in row crops, Canada thistle, sheet sorrel, annual grasses in perennial grasses, wild cucumber, annual grasses in cereal grains, weeds along farm and road drainage ditches, and highland bent.

The spread of weeds by machinery always creates a problem.

RECOMMENDATIONS

.....The committee recommends that a strong, effective research and educational program by Oregon State University for control of various weeds with chemicals be continued.

.....County courts and the State Highway Department should be encouraged to control brush, grass, and broad-leaved weeds on roadsides with chemicals. Not only will this program help agriculture, but it will greatly reduce mechanical road maintenance crews.

.....Farmers should plant clean seed and sanitize mechanical equipment to prevent weed spread. A good, tight truck cover should be a must on every truck hauling grain and seed from field to warehouses. Small seeds have been known to blow 200 feet into a field from the road from an uncovered truck. Commercial and farm warehouses are also guilty of mechanical spreading of weeds. They should clean equipment and floor space frequently, and especially between lots. There may come a time when warehouses may have to meet specified, regulated sanitation inspections in order to operate.

Seed Crops

FIELD SEEDS

Field seeds are nearly all exported outside of the state. Seeds bring money into Oregon. The seed industry is a \$30 million enterprise for Oregon and a \$2,107,000 industry for Benton County.

There were 16,253 acres devoted to seed crops in 1968. Orchardgrass is one of the leading seed crops. Twelve varieties were produced on 3,500 acres. Harvested acres in 1968 were 2,600. Yields vary from 400 pounds up to 1,200 pounds per acre. Billbugs have caused extensive damage to one fourth of the acreage. The problem exists in several other areas of the Willamette Valley.

Ryegrass production has declined 30 percent in the last several years. Most of the decline has occurred with perennial ryegrass. Annual ryegrass acreage has shifted from Oregon common to other varieties such as Gulf, Magnolia, Billion tetraploid, and tetrone tetraploid.

Fine fescues include chewings, Illahee, Rainier, and Pennlawn red fescues and two OECD varieties. The acreage is small compared to that of other counties. The production is in the hands of a few producers who have been engaged in fine fescue production for a considerable time. The quality of fine fescue seed produced is exceptionally high in purity.

Tall fescue seed production is made of three varieties—Alta, Fawn, and a newly developed, private variety. While tall fescue, mainly Alta, is widely used in local pastures, the acreage of seed production — 1,500 acres in 1957 — has never been expansive because of price and market demands.

Bentgrass consists of 2,105 acres and is mostly Highland variety. Penncross, Astoria, Seaside, Exeter, and Rhode Island bentgrasses are also produced. Astoria and Seaside bentgrasses have been successfully grown on wet lands. High yields per acre have been obtained. However, mixtures of Highland interferes with the quality. Highland bentgrass is also considered a bothersome weed grass rather difficult to control.

LEGUME SEEDS

Annual legume seed production varies. Vetches and Austrian winter peas were once popular and extensively produced. A few years ago crimson clover was a rather common crop on the better land. It has dropped off in acreage and has been replaced by more certain and profitable crops.

Biannuals and perennial legume seed crops have been produced in a very limited manner for a long time. A potential of expanded acreage exists with more irrigation. More red clover should be produced for seed.

PRODUCTION

The size of seed production operations varies from a few acres to 8,000 acres. Most of the seed producers have over 500 acres of seed crops. They are producing maximum yields of seed per acre of a very high quality commodity from a purity, germination, and genetic standpoint. The larger operation may lead to a more efficient use of equipment, but the larger operation may encounter more failures and quality problems because of lack of attention. A small unit of highly intensified production of certain kinds may produce a satisfactory profit to the grower.

INVESTMENT

Investment per acre on the average ranges from \$500 to \$550 per acre. Market land values are valued at \$450 per acre. Harvesting, tillage, fertilizer, spraying machinery, buildings, trucks, and cleaning equipment easily come to \$50 per acre if new prices are applied to these items. Seed producers are extensive users of fertilizer and weed chemicals. It is not uncommon to have an annual cost of \$25 to \$35 per acre in fertilizer and \$10 to \$20 per acre in herbicides.

Acreage devoted to spring range production would often be more wisely used if summer followed and converted into seed-crop production. Frequently spring grain production is a money-losing enterprise when yields are low because of disease and weather conditions.

Perennial grass-seed crops have disease, insect, and weed problems which are largely controlled and helped by straw burning after harvest. If the straw is not removed, yields are reduced downward drastically. There has been much concern on the part of the general public about air pollution and wildlife habitat associated with straw burning. Seed producers are complying with state laws and local regulations in regard to field burning. Annual grass-seed straw is burned mainly for a farming convenience. A return to the rotation system of summer fallow one year and harvesting seed the next would eliminate this need for burning annual ryegrass straw. It is doubtful whether the enterprise could justify this program economically. Field burning normally occurs in August and September over a six-week period.

MARKETING

Markets of seed crops can fluctuate because of a number of individual factors which influence supply and demand. These include the size of the supply, weather, interest rates, housing starts, cattle prices, grain prices, money market, overseas demands, Canadian and European competition, international trade agreements, land use, and competition from other crops in the producing area. One of the problems in times of stressed marketing periods is the position that many people in the industry take by doing crash selling or completely unloading. A lack of orderly marketing exists sometimes with a commodity like ryegrass. This only pushes the price down faster and usually to the very bottom.

Accurate marketing data sometimes is hard to gather. Whatever the report may be, it has its influence on the market. Mechanical and genetic purity, germination, and general appearance of the seed and containers help develop a good name for Oregon seed. Consumers are often influenced only by price and still cater to inferior seed.

Enterprise data on cost of production for specific seed crops is nonexistent or outdated.

There were 10,490 acres of certified seed produced in 1968 as follows: 1,495 acres bentgrass; 348 acres bluegrass; 751 acres clover; 1,830 acres fescue; 136 acres grain; 1,973 acres orchardgrass; 3,630 acres ryegrass; 28 acres brome-grass; 11 acres canarygrass; and 288 acres potatoes.

RECOMMENDATIONS

.... The agricultural marketing service of the USDA should prepare estimates of crops as accurately as possible. This will take cooperation on the part of producers and handlers. More contracts may be required. This may take more funds. If so, the USDA should provide them and be supported by the industry in its efforts. Producers and handlers should receive OSU marketing reports.

.... Enterprise data showing costs of production and returns sheets for most seed crops should be revised and prepared for crops that do not have enterprise sheets. This is a job for the OSU Extension farm management specialists and county Extension agents to undertake.

.... Seed quality needs to be kept up. The seed industry and public agencies should keep emphasizing the advantages of using high-quality seed and some of the costly risks of using low-quality seed.

.....Everyone in the seed industry needs to understand orderly marketing. This is a desirable subject for educational meetings.

.....Air pollution can be reduced if all seed producers follow burning regulations. The general public will need to be informed continually about the necessity of seed-crop residue burning. Experience of the past shows the necessity of burning crop residue of perennial grass fields to aid in the control of disease, insects and weeds, and to prevent stand smothering. Even when straw has been removed for other use, it is advisable to burn the remaining refuse. When residue burning is not required in specific situations, it is recommended that burning not be done. The committee believes in planting a fire guard strip of sudan around fields where feasible. Such a strip will provide wildlife feed and habitat. OSU should conduct more research on stubble disposal in relation to burning, air patterns and other means of disposal. The general public needs to be fully educated on field burning. Field burning is only a part of the air pollution problem.

.....All OECD (Organization for Economic Cooperation and Development) varieties should be screened and tested by the OSU Farm Crops Department to determine if such varieties will meet disease resistance requirements and to determine growing habitats and yield capacities under county conditions before the varieties can be used in commercial production. As it is now, some of these varieties have been failures. Prices quoted to producers for OECD crops should

be high enough to detract extra production costs.

.....Continuous research needs to be carried out for disease and insect control, better varieties, and different varieties for various markets. Much of this work will need to be done by Oregon State University. Of immediate importance to the orchardgrass industry today is a billbug research control program.

.....Irrigation can plan an important part in seed yields and stand management for additional forage uses. Producers should consider irrigation and use it when available and feasible in seed-crop production. Sometimes irrigation may be the limiting factor between failure and success.

.....The committee recommends the production of cannery peas because they can produce some profit and fit in well with the establishment of certain seed crops the same year on our better soil types.

.....Vegetable seed production may have opportunities with certain producers in a limited way, but producers must follow an intensified program to obtain satisfactory yields and high quality.

.....Seed certification should be used by growers when it is feasible. Certification often helps sell seed. Producers, handlers of all kinds, and the OSU Extension Service should conduct the program on the highest level, yet be practical. Growers should keep field history records up-to-date and watch isolation requirements and serious noxious weed problems.

Forage Crops

PASTURE

There are 24,000 acres of perennial pasture in Benton County, 2,500 acres of which are irrigated. The varieties of grasses and legumes used in these pastures are recommended for this purpose. Most of the irrigated pastures are managed quite well in many respects. Some pastures could be fertilized more heavily and rotated more for maximum yield. Many of the dryland pastures are not fertilized for maximum yields, nor are they properly rotated and clipped to obtain greatest efficiency.

Fencing is one of the reasons why pastures are not rotated. Usually stock water is not the major problem in rotation.

It costs about \$60 per acre to establish a perennial pasture. Cost includes seedbed preparation, fertilizer, seed, and sometimes lime.

At one time there was extensive use of logged-off land for grazing purposes on an interim basis. The cutover land was burned immediately after logging and seeded to perennial grasses. In about 12-15 years' time most of the grass was crowded out with reforestation. There is an opportunity to utilize forest land for pasture in stands of 35-70 year old Douglas fir where salvage logging is practiced. This practice opens up the stands and gives them more sunlight. While total production of grass per acre would not come anywhere near that of an acre of cropland seeded to pasture, there would be considerable grazing, and the procedure would not affect tree growth. This conclusion is based on observations where some grazing prevails in stands of this kind. A grass and grazing practice in timberland would necessitate a fencing program of some nature.

Grazing of lands for reforestation can be a hindrance to reforestation if an area is overstocked or overgrazed, because livestock will reduce the tree growth and in some situations eat young seedling trees. One demonstration area where sheep have occupied land planted to trees in 1957 shows these trees to be no higher today than trees on a non-grazed area across the fence that was planted in 1957 after two years of growth. The nongrazed trees in 11 growing seasons are 10 times higher. The grazed area has been definitely overgrazed.

Much of the ryegrass used for seed production is also grazed in the winter with sheep. It is a common practice to pasture off excess fall and winter growth. This sometimes amounts to as much as \$5 per acre pasture rental to the ryegrass grower.

Recommendations

.....The committee believes great gains can be made by properly managing our dryland pastures and to some degree some gain can be made by improved management on some irrigated pastures.

.....The committee recommends that research on a large scale in the Willamette Valley with irrigated pastures should be conducted by Oregon State University. Greater educational programs should be carried out in regard to use of commercial fertilizer and rotation of pastures. Cost and return records need to be kept with a number of demonstrations. On-the-farm demonstrations should be conducted in the use of electric fences for sheep.

.....Additional use of low-quality hay and grass-seed straw can be emphasized as a supplemental feed for beef cattle on pastures in August and September, which are short-pasture months.

.... Supplemental use of older stands of young timber for grazing should be emphasized.

SILAGE

The use of silage is largely confined to dairy cattle. In some situations beef cattle and sheep are being fed silage. Silage can be a way of reducing forage costs when the size the herd or the flock justifies the silo and equipment for silage making. People who produce silage at the lowest cost per ton are those who grow the highest yields per acre.

Grass and legume silage from first cutting alfalfa and clovers can insure a better quality forage because of rain damage. Some field corn silage crops have yielded as high as 35 tons per acre when the crop was irrigated.

Recommendations

.... Cattle producers should consider the use of corn, grass, and legume silage in their feed program. They need to use methods producing maximum yields per acre of high quality silage.

Hay

The production of hay for sale is rather limited in this area because of the declining numbers of livestock. Additional hay production will be warranted if livestock numbers should increase. Improved varieties always add to the efficiency of hay production. Hay quality factors, maturity, and color are always problems because of weather.

A search for improved varieties of alfalfa, clovers, and grasses for forage use and especially hay should be continued.

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Horticulture Committee Report

Horticultural crops grown in Benton County are diverse. Crops include small fruits, tree fruits, vegetables, and specialty crops such as holly. Many of these crops are part of the overall program in some diversified farms, and in some cases the whole farm enterprise is devoted to horticultural crops.

Fifty thousand acres of soil in the county are suitable for various horticultural crop production, depending upon water, management skills, etc. Most of the soils are well-drained, river-bottom soils located along the Alsea, Willamette, and Marys river and other smaller streams. In addition, any hill soils are suitable to various horticultural crops, particularly the small fruit and tree fruit crops.

SMALL FRUITS

Small fruit production is occurring on 340 acres. Typical small fruit production includes blueberries, blackberries, raspberries, and strawberries. Small fruits are grown on a wide variety of soils in the county, but most of the commercial production is on the Chehalis and Newberg type soils.

Some of the problems of small fruit production are listed below:

.....The biggest problem facing the small-fruit producer is the availability of hand labor to harvest the crops and perform some other tasks.

.....Root rot, especially red stele, is still an obstacle to strawberry production.

.....Caneberries (raspberries especially) are susceptible to many diseases which carry over in the soil.

.....Land costs are high because small-fruit producers compete with subdivision and with other crops.

.....Water for irrigation is short in several areas in the county.

.....Cost of equipment and other items make it difficult for the grower to succeed on a few acres.

.....Some small fruit crops such as blueberries find an irregular market.

.....Small fruit acreage is less than the amount that local processors need.

TREE FRUITS

Tree fruit production in the county involves several types of fruit. The main tree fruit crops are the nut crops—filberts and walnuts. Other produced in the county are peaches, cherries, prunes, apples, and pears. Total production in the county requires 1,625 acres.

Soil suitable for tree fruit production is found in all parts of the county. However, specific problems arise in the individual crops and are listed below:

.....Many tree fruit operations are small, making the conversion to mechanical pruning and harvesting costly.

.....Frosts and freezes occur in certain areas and years and are a big factor in the production of cherries, peaches, and prunes.

.....Soil erosion continues to be a problem, particularly in the orchards subject to winter river flooding.

.....Disease and insect control is a constant problem. Cha-

nging methods and attitudes on use of pesticides may alter methods of control. Also, some insects are showing indications of developing resistance to certain insecticides.

.....Because land costs are high, the planting of new orchards is impractical in some areas.

.....Tree fruit and nut crops are not receiving sufficient research funds.

.....Very little research is being conducted in the area of stone fruits.

.....Deer, nutria, and other small animal damage in certain areas of the county.

.....Bird damage in cherry and nut orchards is considerable in some years.

.....Unsprayed cherry trees in subdivisions are contributing to a worm problem for those orchardists who are trying to take care of their orchards.

VEGETABLES

Vegetable production has been the fastest growing segment of the horticultural crops for the past several years. Changes have been rapid, but many of these contribute to the county's agricultural economy.

In 1968, gross farm income in Benton County was \$2,547,000. It is utilizing 5,987 acres. The acreage figure could be doubled if water problems were solved and market demand increased. The vegetable crops industry (and other segments of horticulture) is well served by food processors in Corvallis, Albany, Salem, Harrisburg, and Eugene.

Problems of the vegetable crops industry are listed below:

.....Soil contamination by pesticides has rendered some ground unusable for root crops such as carrots and beets.

.....Some areas in the county have good soil but are lacking in sufficient irrigation water to raise vegetable crops.

.....Conversion to bush beans requires the use of large blocks of land. Some growers may be forced to raise large acreages on several small parcels.

.....Good farm labor, either to do hand work or skilled to run machinery, is sometimes difficult to find.

.....Soil erosion on Vegetable-crops land in overflow areas continues to be an obstacle.

.....Some rodent damage occurs in vegetable crops. Lately damage from nutria has been occurring.

.....New minimum wage laws, etc., impose a bookkeeping burden on the grower which tends to make the grower more interested in mechanical harvesting methods.

.....Disease has been somewhat of a problem in vegetable crops. In recent years, smut has been increasing in sweet corn.

.....Clearing of land in river-bottom areas has increased the wind problem. This has been critical during periods of hot, dry weather in spring and summer.

.....Some bird damage does occur in sweet corn, starlings and blackbirds being identified as the main birds involved.

SUMMARY OF RECOMMENDATIONS

The horticulture industry is a strong part of the agricultural economy. Because of this strength, certain attention should be given to some of the problems of the horticultural

producers. Some of the recommendations of this are given in the list below.

Opportunities for expansion in the horticulture industry exist. Especially optimistic is the expansion possible in small fruits and vegetables. Some expansion is possible and is occurring in the nut crops. More peaches are needed to satisfy local market demands. Other opportunities also exist.

.....Horticulture crops growers should keep themselves abreast of new information by attending short courses, tours, and other educational activities of grower organizations.

.....Growers should investigate the use of custom operators to take care of some of the farm operations such as spraying, trucking, and bush bean picking. In some cases this may help fight off the cost-price squeeze.

.....Growers in areas short of irrigation water are urged to join other growers and work with appropriate agencies to find sources of water.

.....All horticulture crop growers are urged to carry on good soil management practices, such as cover cropping to fight soil erosion and maintain fertility.

.....Attention should be given to the possible soil residues that may remain after the use of insecticides and herbicides and cause problems in future crops.

.....Increase in the acreage of small fruit crops, especially strawberries, is recommended.

.....Planting of certain tree-fruit crops such as filberts and peaches is recommended. However, attention must be given to type and size of planting in relation to possible mechanization of harvesting and pruning.

.....More applied research could be conducted in the field

of combining efforts of research and the Extension Service.
.....Growers should be alert to the possibilities of pesticide resistance developing in insects they are presently controlling.

.....The committee urges that more research be conducted in the areas of tree fruits, especially in the stone-fruit crops.

.....Growers are urged to support their farm organizations as their voice in society.

.....Research should continue in fertilizers and optimum plant spacing, particularly in vegetable crop production.

.....Damage from rodents and birds should be brought to the attention of the appropriate fish, wildlife, and game management personnel.

Committee Members

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Poultry Committee Report

Oregon's poultry industry is going through many changes as it is in other parts of the United States. The industry is becoming more highly commercialized. Operators are larger and many small ones are being eliminated. This includes producers, hatcheries, feed companies, and processors.

Other trends include integration, tie-in operations, contract production, mechanization, bulk feeds, better quality production, attractive and convenient packaging, and a reduction in the cost of production and marketing. These benefits have been passed on to the consumers and will likely continue.

Benton County's poultry production has gone through an extensive decline in the last 20 years. There are no commercial turkeys being produced in the county. Laying hens have declined from 70,000 in 1957 to 28,000 in 1967. Broiler production has stayed around 350,000 to 400,000. There are only four commercial poultry producers left in Benton County. The principal reason for this change has been due to low economic returns for the small operators. They chose not to get larger and liquidated their poultry enterprises.

Local markets are available, and a very good poultry processing plant is located in Corvallis. The plant could be expanded. It can also handle a significant increase in local production of eggs and poultry meat.

The gross income from poultry products in Oregon in 1966 was \$37,715,000. This was an 18 percent increase over 1965. Of this total, 45 percent was from eggs, 30 percent from turkeys, 23 percent from broilers, and 2 percent from other farm chickens. The 1966 income from poultry products in Benton County was \$276,000.

COMMERCIAL EGG PRODUCTION

Oregon produces 276 eggs per capita. About 15 percent more eggs are consumed than produced in the state. California and Washington are both producing a surplus, especially in California. Oregon normally uses 4 to 5 percent of its egg production for hatching. Benton County is one of the deficit areas in egg production.

In the past most of the commercial egg producers carried from 2,000 to 3,000 layers. Today, most of them are thinking in terms of 20,000 to 30,000 layers or more. Some farmers and people that work in other industry carry a sideline flock of layers. Such units should be 1,000 layers or more.

It is anticipated that the margin of profit per dozen eggs and income per layer will decrease. These reductions will be offset by larger flocks, increased rate of lay, less mortality, better egg quality, less feed to produce a dozen eggs, and labor-saving equipment.

The high cost of grains in the Pacific Northwest compared to cost in several other areas in the United States gives us a poor egg-feed ratio. The egg-feed ratio is the pounds of feed that a dozen eggs will buy at any given time. The 1967 cost to produce one dozen market eggs was 28 cents. Cost of feed is 61 percent, cost of pullet and hen depreciation is 21 percent, labor cost is 11 percent, and miscellaneous taxes and interest are 7 percent. The feed cost is 17 cents per dozen.

Recommendations

....The committee believes opportunities prevail for commercial egg production in Benton County for those who might be interested in engaging in this business.

....The commercial laying flock should be 20,000 to 30,000 birds or more with an annual production of 250 eggs per bird on 4 1/2 pounds of feed per dozen eggs with less than 8 percent laying house mortality.

....Chicken hatching egg flocks should be 3,000 to 5,000 or more with a season average of 90 percent more fertility and 85 percent or more hatchability of all eggs set

....A strong consumer educational program will need to be developed advocating at least an egg a day per capita and presenting information about how to use eggs in cookery and the food value of eggs. The quality of commercial eggs will have to be kept high.

BROILER PRODUCTION

Oregon is consuming 43 percent more broilers than it is producing. Benton County produced 400,000 broilers in 1967, according to the two major producers. Most commercial growers raise from 25,000 to 100,000 per brood. They raise four to five broods per year. Part-time producers raise broilers to supplement their income. A feed conversion of one pound of gain to two pounds of feed enables the local operator to stay in business.

The broiler industry operates under contract with a processing firm. Without a contract, marketing difficulties are encountered. The labor income per broiler has recently ranged from 5 to 10 cents per bird. Broiler prices and the margin of profit per bird are expected to decline. These reductions may be offset by larger flocks, less feed per pound of gain, less mortality, better quality birds, and labor-saving equipment.

The cost to produce a pound of broiler, live weight, is 16 cents. Distribution of costs are: feed, 63 percent; 25 percent; labor, 6 percent; miscellaneous costs, taxes and interest, 6 percent.

Recommendations

....The committee believes there is opportunity for expanded broiler production in Benton County. They recommend that producers become fully acquainted with the methods of operation for the industry before undertaking broiler production. Promotion of Oregon-grown fryers is carried on by the industry through the Oregon Fryer Commission.

TURKEY PRODUCTION

Twenty years ago Benton County had a million dollar turkey industry. An unfavorable turkey-feed ratio -- due mainly to the high cost of feed -- caused turkey production to decline to nothing in Benton County. The Pacific Northwest is consuming considerably more turkey than it is producing. We produce about six pounds per capita but consume about nine pounds. It requires 3.8 pounds of feed to

produce a pound of turkey, Feed costs are high compared to those of other areas of the United States. It costs about 21 cents to produce one pound of live turkey. Feed represents 53 percent; labor 19 percent; flock depreciation 14 percent; and other costs 14 percent.

Recommendations

.....The committee believes there is an opportunity for someone with capital to invest in a large operation where at least 10,000 to 20,000 market birds can be produced,

.....The breeder phase is a highly specialized industry and should not be undertaken unless a person is familiar with this segment of the business. The most efficient methods with a minimum of labor will be necessary to engage in a profitable enterprise.

.....The committee does not recommend small flock production unless an individual prefers such an operation as a hobby. There are many complications in marketing and processing that would be objectionable today if such birds were sold as they were at one time.

GENERAL POULTRY RECOMMENDATIONS

.....Location of a commercial poultry enterprise should be made where it will not conflict with industry and housing development.

.....Consideration should be given to manure disposal methods and problems. Pollution of streams should be avoided. Waste disposal will have to comply with state laws. This included disposal of dead birds, especially for feed use of any kind.

An adequate water supply of suitable quality must be available. This includes not only drinking water for the birds, but water for cleaning and in some situations for manure disposal.

Committee Members

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Don Huge

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Livestock Committee Report

General Livestock

Benton County had \$1,718,000 of 1968 livestock marketed from beef, swine, sheep and Angora goats. Livestock income has been declining in Benton County for about 15 years because of rural housing development, higher paying enterprises, rural people finding employment in other industry, increasing age of the operator, renting of places to large field crop and vegetable farmers, and predatory animals. Much of the enterprise data information on beef, sheep, and swine showing costs and returns is outdated.

Excellent marketing facilities are available through the Corvallis Livestock Auction Market, feeder cattle sales, lamb pools, local private buyers, and processing plants,

Increasing population is augmenting a demand for the reduction of air and water pollution and of flies from livestock operations. Residents near livestock operations may have a fly problem from other sources. Barn and house flies create the problem, not the horn flies on the livestock.

A limited amount of grass straw burned after seed harvest could be utilized for livestock feed. On land rented for crop farming, there are corners and waste areas that are not being utilized and could be used by livestock.

Fencing is a livestock management problem and permanent fencing has been favored by some with less interest in the use of temporary fences, including electric fences. Electric fences could be more widely used. Chemicals are available for controlling grass and brush under electric fences and not damaging the pasture for livestock use. Many of these chemicals have not been cleared for such use.

There is a mineral deficiency in some Benton County hill soils which seems to have a relation to the productivity and health of livestock foraging on these fields or eating the feed stuff produced on them.

Most inspection of domestic meat is highly adequate by state and federal inspectors. There are questions about

imported meat being handled and inspected under minimum United States and state standards.

RECOMMENDATIONS

.....The committee believes production can be boosted by utilization of waste areas, greater use of electric fencing and other temporary kinds of fencing, use of improved pastures, fertilizer, and a more effective predatory animal-control program. More herbicide chemicals for use on forage crops should be cleared as soon as possible.

.....Some forest land can be utilized by livestock at various stages of the production cycle, providing such areas are not overgrazed.

.....The committee recommends that producers do not overstock their pasture and housing facilities.

.....If community irrigation projects in the county and other Willamette Valley counties are developed, an expansion of the livestock industry will be necessary to utilize production from much of this land.

.....Research projects and demonstrations should be coordinated between the OSU animal science department and the Extension Service, breed and producer associations, and other segments of the industry.

.....The OSU Extension agricultural economists and Extension agents need to update enterprise data sheets on livestock production using their common form.

.....Livestock waste disposal and offensive odors should be handled in accordance with state and county sanitary regulations to control air and water pollution. Flies need to be controlled not only for more livestock efficiency but to reduce the fly problem with nearby residents. The general public should realize that eventually they will be paying for these controls. The controls may force some operators out of business.

.....All imported processed and slaughtered meat should meet United States health and sanitary standards.

Sheep

Sheep are an important segment of our livestock industry. There are 12,000 ewes in the county and 160 producers. The ewes are mostly medium woolled with some long wools. Many of the flocks are small in size. The majority of the sheep are in the hands of about 10 operators. Some commercial producers grossed \$40 per ewe in 1968. In a sheep enterprise study the average commercial ewe in 1968 grossed \$28.37. Cash expenses were \$24.34, leaving \$4.03 profit. When noncash expenses were added, total expenses were \$33.15 leaving a loss of \$5.78.

There are two main segments of the industry -- lambs sold off of the ewes in the spring and feeder lamb operations mainly on winter pasture. These are lambs brought in from other areas.

The sheep industry has declined in the last 10 years. The quality is good. There is room for improvement in

quality, disease control, and in pounds of lamb and wool per ewe. The sheep-quality factors needing improvement the most are increased size and cutability of carcass. Many producers could give more attention to the productive ability of the ewe flock and the kind of rams they are using.

Major production problems of the sheep industry are foot rot (considered to be the number one problem), internal parasites, pulpy kidney disease, white muscle disease, ewe paralysis, pinkeye, and diseases of the reproductive organs.

Winter feeding for the flocks that lamb in December, January, and February normally consists of three pounds of legume hay and one pound of whole grain per day. This amount of feed conditions the ewe for lambing and prevents ewe paralysis. After lambing and while the ewes are still kept in confinement awaiting good pasture, the straight grain feed may not be sufficient to produce the desired flow of

milk.

Recent publicity in farm magazines about litters of lambs has created a number of inquiries.

RECOMMENDATIONS

....It is recommended that the Oregon State University Animal Science Department continue to do research for finding a more desirable foot-rot control germicide. The Extension Service should continue to encourage producers to use the sheep trimming table. This takes a lot of the hard work from the job. The flock should be checked three and four times a year for foot rot except when there is an outbreak. Constant inspection is needed with a foot-rot outbreak.

....Internal parasite control, pulpy kidney, white muscle disease, ewe paralysis, pinkeye, and diseases of the reproduction organs are problems the experienced producers seem to control pretty well. New people in the industry need to be advised continually about these problems by the Extension Service and by others and told how they can be controlled.

....Benton County has good-sized ewes. They average 150 pounds per head. Some ewes exceed 200 pounds in

weight when in moderate condition. The quality of sheep needs to be improved continually. The production testing program for both commercial and purebred breeders can increase returns by 20 percent in many flocks. Production testing provides the sheepman with greater assurance that his flock will perform well. Flock owners should use high-quality rams even though they cost more money. A good ram can increase the weight of the lamb crop by 15 percent. Early ewe lambs should be saved for ewe replacements.

....Research work should be conducted using a high protein feed comparable to a dairy ration for early-lambing ewes after they have lambed for increased milk production.

....The possibility of raising litters of lambs should first be investigated by the OSU Animal Science Department to determine the feasibility of this practice.

....Good management is one of the important influences involved with early lambing, higher percentage of twins, and a high yield of lamb and wool per ewe.

....The general conformation of our sheep can always be improved. All producers should be encouraged to produce a 100-pound live market lamb.

....More sheep are needed in the county to utilize feed. Sheep can reduce seed surpluses such as ryegrass and weed problems such as wild carrot and tansy rag-wort. The ewe population needs to be increased from 12,000 to 18,000.

Beef

There were 4,000 beef cows in Benton County on January 1, 1968. The value of the beef enterprise in 1968 was \$1,125,000. The beef cattle enterprise is largely a cow-and-calf operation and to a large degree occupies the foothill areas of Benton County. Very few cattle are fed to slaughter grade and weight. One operator feeds cows cannery waste and sells them for beef. There are six purebred herds of excellent quality in the county that produce breeding stock. Most of the cow herds are 30-50 cows in size. Beef cows generally weigh 1,100 to 1,200 pounds.

At present, cattle numbers are somewhat on the decline because of other interest of the owners. Most beef cattle herds are a sideline operation handled by someone employed in other industry or engaged in other farming operations.

Regardless of how well the operator may attempt to handle his cattle and feed, no two places are the same and not two years alike. Beef cattle profit is never very high. A typical average 1968 gross return per cow was \$113.03. Cash costs were \$77.84, leaving a net of \$35.19. When non-cash expenses are added, costs go up \$144.44, leaving a loss of \$31.41 per cow. Because of high land costs the investment per cow usually runs around \$800 to \$1,200. Other agricultural enterprises are faced with the same situation. Excellent marketing facilities for all kinds of beef cattle prevail at the local auction yard and meat packing plants nearby.

Some of our major problems are: (1) the improvement of pastures to produce more beef per acre at less cost, (2) reduction of other feed costs without forfeiting desirable results, (3) use of bulls that will increase the pounds of beef per cow and improve cutability, (4) expansion of production testing in both commercial and purebred herds, (5) a way to increase the number of beef cattle in the county, (6) diseases which include calf scours, shipping fever, black leg,

and pinkeye, (7) parasite control, which includes face flies, heel flies, and stomach worms, and (8) adequate corrals and handling facilities.

RECOMMENDATIONS

....More beef cattle numbers can be encouraged by utilizing more waste feed and considering net returns of other enterprises and expanding individual operations. When the latter is done, feed supplies and housing facilities must be considered since these two items may need to be expanded.

....All beef cattle producers should keep production records. In addition to weight performance all phases of conformation, including cutability, should be considered when selecting brood cows and bulls. Feed costs and quantities need to be kept for feed conversion efficiency and costs, since feed is 60 to 70 percent of the cost of production.

....OSU should conduct more research and demonstrations and other educational programs to furnish information on how to produce more feed per acre and control various parasites, including face flies and pinkeye.

....Some preconditioning of calves at weaning time should be done by all producers whether they sell the calves or keep them at home. Buyers of preconditioned calves must realize that costs for this practice will be about \$2 per head. Handlers of weaner calves should not be so "production-volume geared." Calves are not like a nonliving bulk commodity such as grain, lumber, or cement. A good job of feeding and sheltering newly weaned calves is the first essential. The cost can be recovered by gains in the calf weights prior to selling.

....Preconditioning of calves consist of weaning calves two to three weeks before selling them and giving them shots for various respiratory diseases, brucellosis, sometimes

stomach worms, heel fly and lice control, etc., and adjusting to dry feed. Feed lots are demanding more preconditioned calves and are willing to pay from \$1 to \$2 per head more. Why? Preconditioning reduces the feed lot man's losses and costs, and the calves gain faster.

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Dairy Committee Report

Benton County had 17 Grade A milk producers at the close of 1968 -- one fourth of the number just 10 years ago. Manufacturing milk producers have practically disappeared. Dairy cow numbers, now at 2,000 are about half the number a decade ago. Milk production from remaining cows has increased sharply. Local DHIA records, a good sample indicator, show average milk production increasing 50 percent since 1958.

With all of the changes in cow and dairymen numbers the gross value of milk sales has changed very little in the last 10 years and another 10 years prior to that. Production increases, shifts to Grade A production, and minor price adjustments have offset decreasing cow numbers. Milk sales have supplied \$800 to \$900 thousand of agricultural income to Benton County since 1944. Over this period, dairy's share of the county's agricultural income has dropped from 20 to 8 percent.

This shrinking of cow and dairymen is generally shared with other Oregon counties thus is not the result of locational disadvantages. Low net returns and growing capital requirements are among the factors at work. Larger herds, better housing, feeding, and management along with labor efficiencies are important characteristics of remaining dairymen.

MARKETING

Marketing has been and will continue to be a major problem facing dairymen. Dairymen can solve market problems only by working together over a large geographical area, one that is constantly growing larger.

Free market conditions are preferred by dairymen but experience has demonstrated the need for some level of market control that applies equally to all dairymen and distributors. Oregon's milk marketing act with recent amendments generally meets these requirements except for its inability to control out-of-state milk. The supplemental federal order proposal now under consideration may supply a satisfactory solution and is recommended only if it does not materially replace the provisions of the Oregon milk marketing act.

REPLACEMENTS

The replacement problem, growing steadily over the past few years, has reached the position where it is materially affecting the production stability and production levels of many dairymen. The extra replacement supplies from manufacturing milk herds and those selling out is running low. Few of the remaining dairymen raise nearly enough of their own replacements. The supply of replacement dairy animals is expected to be inadequate for some time in the future.

An ideal replacement program should supply one new animal for each two animals in the milking herd each year to make significant improvements in the herd production and supply-production flexibility, and for required replacements.

LABOR

As herd size increases, more and more of the labor requirements have shifted from the family to hired labor. Labor-saving investments feasible with larger herds offset some of the increased needs but usually place new demands upon labor capability. Dairymen must carefully analyze these and other factors to maintain a balance between capital investment and labor.

Dairymen report more concern over the availability, ability, and reliability of hired labor than its cost. On the other hand, improved working and living conditions and other noncash fringe benefits are increasingly valued by hired labor. The needs and wants of labor and management must both be recognized and reasonably provided to produce the best income and satisfaction to both. The dairyman's labor management skills cannot be overemphasized because he must adapt his needs to the labor supply available.

MANAGEMENT AND RECORDS

Total management abilities and practices determine the success or failure of individual dairymen. Management requirements grow rapidly with larger herds and technological changes. In the past, management has been more related to production. General business and financial and labor management are among the skills the dairymen of today and tomorrow are finding increasingly important.

Farm records supply the best management tools available to the individual dairyman. Cost records, production records, and breeding records are all important to successful operations and can be collected by the individual or by services available to him. This collection and maximum use of records for management decisions provide means of control the business, just as buildings control the weather or fences control the stock.

FACILITIES

Obsolescence rather than physical depreciation is often the overriding consideration in remodeling or replacing facilities. Dairymen generally recognize the problem but are often limited by their present investment in buildings and equipment and their financial resources. The result is continued operational inefficiencies that affect labor production, herd health, and other factors which place the individual at a competitive disadvantage.

Dry-lot operations are receiving increasing attention. Completely enclosed housing may prove advantageous under some conditions. The advantage of dividing larger herds into units has been demonstrated. Free-stall housing has proven adaptable to all ages.

MANURE HANDLING AND BEDDING

Manure handling is receiving particular attention by dairymen because it is one of their toughest operational

problems, and the pollution and sanitation considerations demand attention. While manure storage and disposal methods are receiving the most consideration, the methods and efficiencies of moving manure from the housing to storage must not be neglected.

With the prevailing free-stall housing system producing little bedding material in the manure, concrete storage tanks with disposal by pumping to sprinklers of liquid distribution tanks provide the best solution to handling and pollution problems. Generally, tanks should have a minimum capacity for 30 days, based on two cubic feet per cow day. If sprinklers are used, separate water storage to flush the pipes should be designed in the system. Water-flushing systems should be considered where adapted.

Manure storage and distribution facilities that reduce pollution and are constructed after 1967 are eligible for tax relief benefits up to as much as 50 percent of the cost of the facility. The public, backed by pollution control laws, is increasingly demanding control of manure.

Wood-waste bedding supplies are rapidly becoming a major problem with the increased value and utilization of chips, shavings, and sawdust by pulp and wood product plants.

RECOMMENDATIONS

.....Dairymen should support increased efforts to develop new milk products and promotional efforts through the industry's established organizations. Nationally by state, the industry should work toward removal of what were originally milk protection laws so that milk and its products can enjoy the widest possible market base. The dairy industry must meet the competition of milk substitutes and milk or milk products free of restricting laws and with aggressive promotional efforts.

.....The modified federal order as currently proposed and under review should be supported by dairymen. A standard federal order program that would replace the present state law should not be supported.

.....The dairy industry should continue to accelerate its studies of new pricing formulas for milk, emphasizing SNF and protein to reflect the uses and values now placed on the components of milk.

.....Dairymen should raise all of their own healthy female

calves or develop contractual agreements with other persons to raise the calves for them.

.....Dairymen using hired labor should improve their own labor management abilities and recognize the increasing importance employees place on noncash fringe benefits. Dairymen must recognize the right of dairy labor to organize and expect this development within the near future. There is a need to attract and train dairy farm employees on some formalized basis. The present supply of qualified dairy laborers is inadequate.

.....Dairymen should recognize the increasing importance of management skills other than production management. Training opportunities in management are needed. There is a need to define more clearly and identify the dollar value of the tools of management and improved management decisions. The financial results of good and bad decisions arising from all types of dairy records and management skills of the dairyman are usually lost in capital and production costs and returns.

.....Dairymen faced with major remodeling needs should carefully evaluate their situation and develop an overall long-range plan that will maximize their long-range facilities efficiency. In some cases complete new plants should be developed if financing can be arranged. Dry-lot operation or movement toward dry-lot operations increase with larger herds. Major efficiency opportunities exist particularly for larger herds in improving facilities for raising calves and heifers using stall housing.

.....Dairymen must recognize the rapidly approaching pollution control demands that will force them to capture and control manure. They should consider the construction of manure tanks at the earliest possible time, taking maximum advantage of the tax relief benefits now available. Help is needed to solve most economically the bedding supply problem. Research and trials of alternative materials as well as methods of minimizing the use of bedding is requested.

Committee Members

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