

# **Subsistence in Rural Alaska's Mixed Economy**

**Prepared by:**

**Division of Subsistence,  
ADF&G**

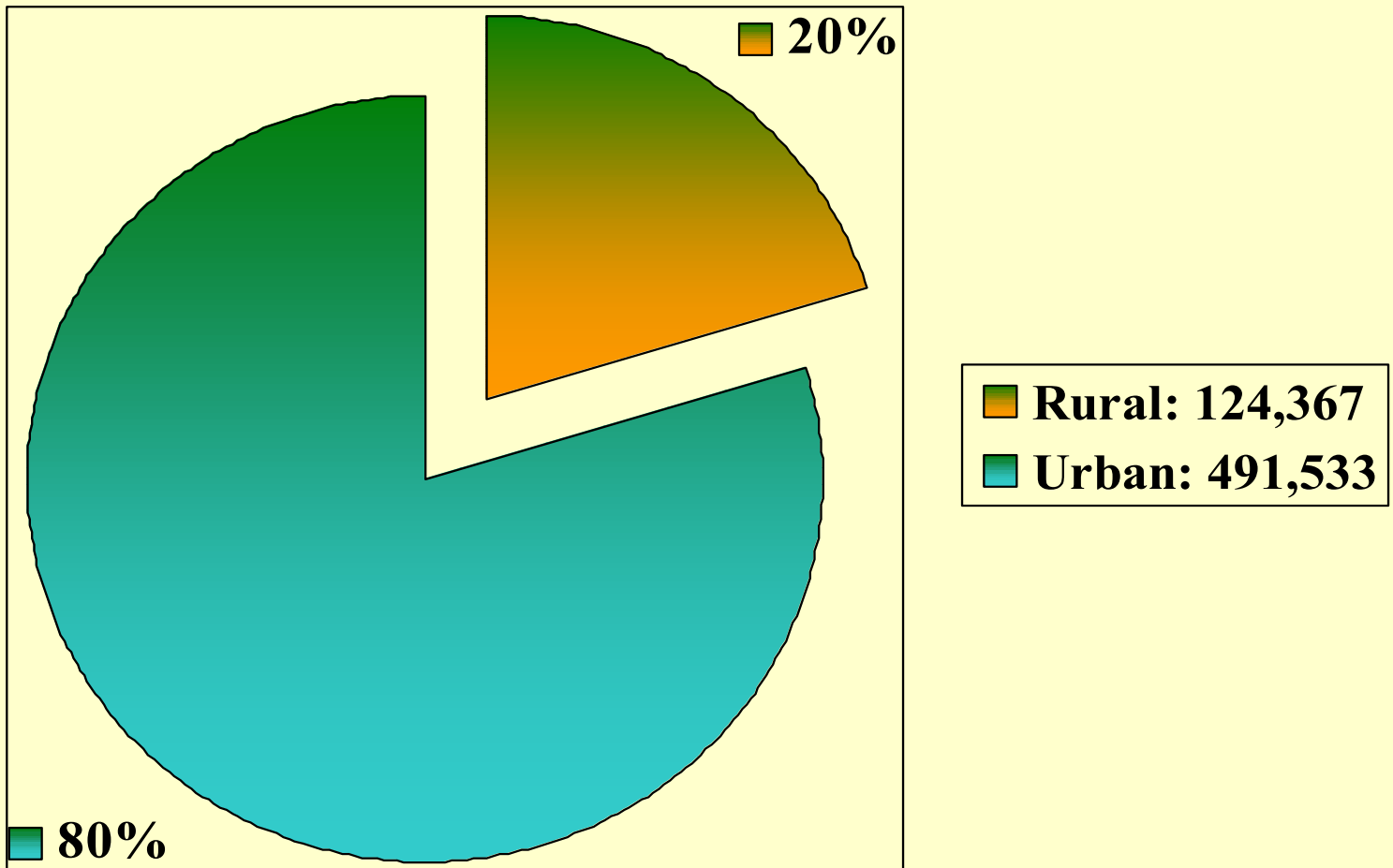
**April 2000; updated February  
2001**

# **SUBSISTENCE DEFINED**

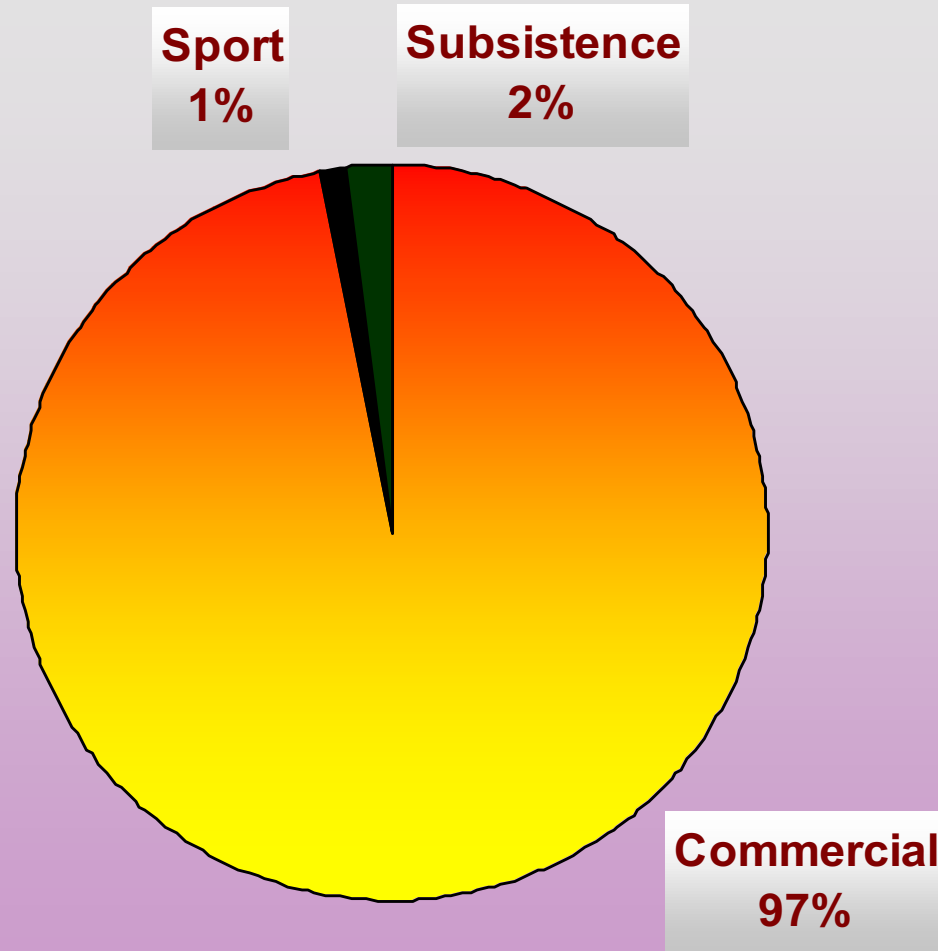
**It is the “Customary and Traditional uses” of wild resources for food, clothing, fuel, transportation, construction, art, crafts, sharing, and customary trade.**

# Who participates in subsistence uses?

## Alaska's Population by Rural and Urban, 1995



# Who harvests Alaska's fish and wildlife?



# **Features of Subsistence in Rural Alaska Today**

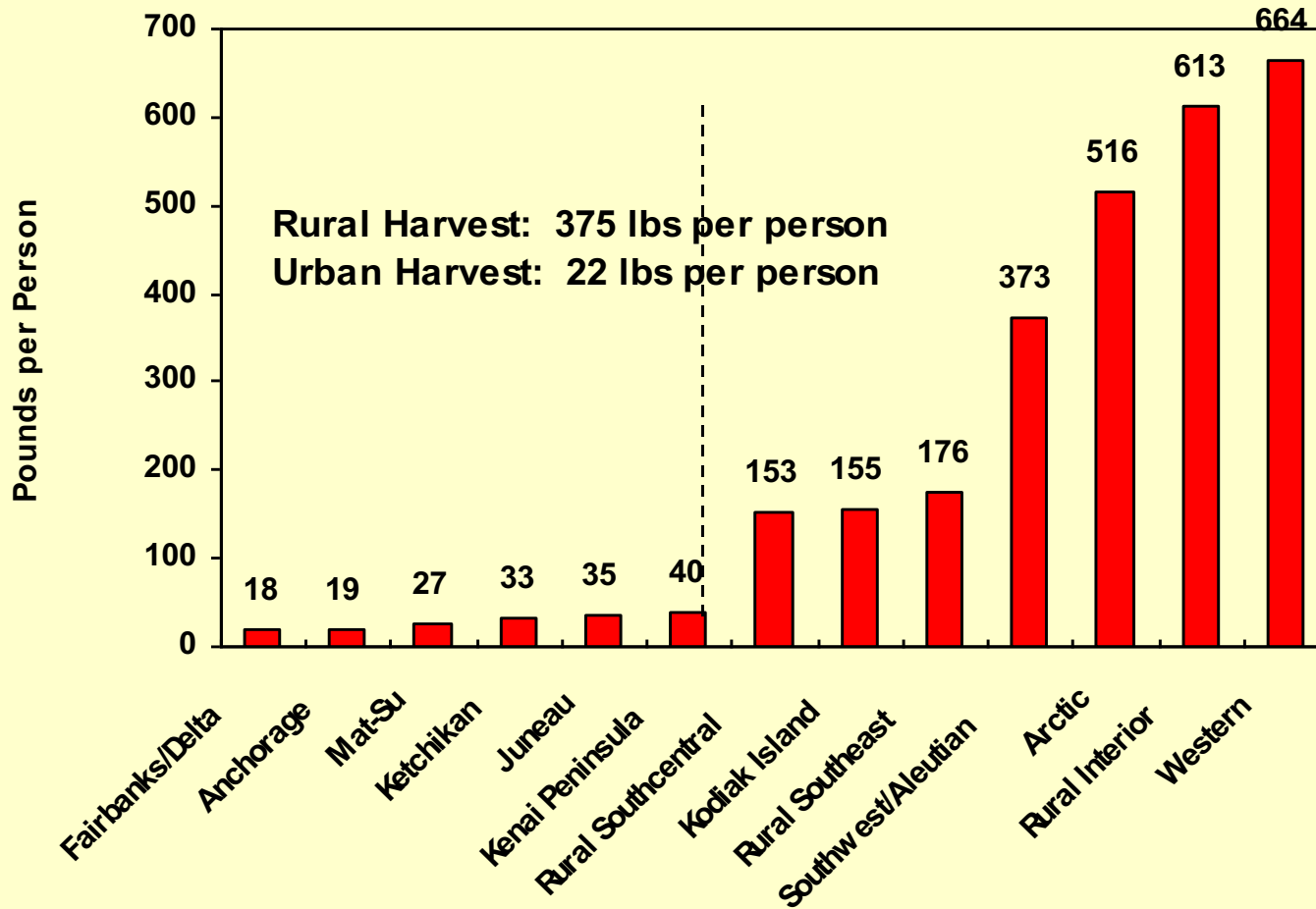
- **Mixed economy: cash and subsistence sectors support each other**
- **High participation in subsistence activities**
- **High levels of subsistence harvest; high nutritional value**
- **Diverse range of resources used**

# FISH CAMP ON THE COPPER RIVER



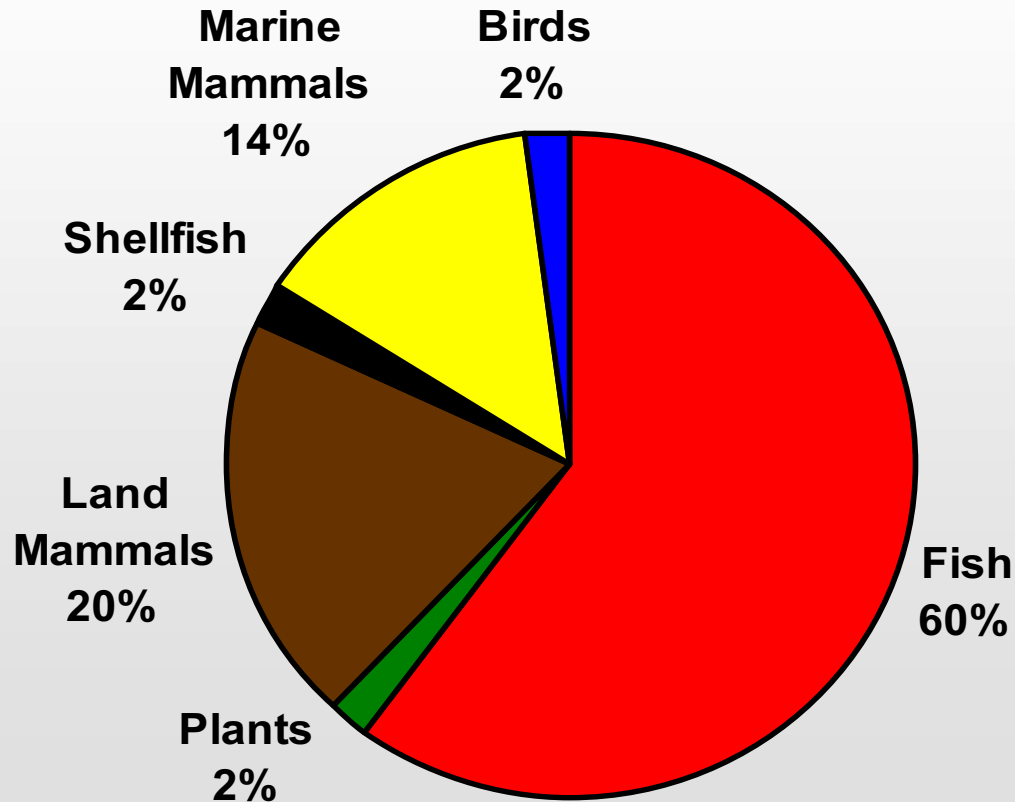
# Where do Subsistence Harvests Occur?

Wild Food Harvests in Alaska by Area, 1990s



# What resources make up the subsistence harvest?

## Composition of Subsistence Harvest by Rural Alaska Residents

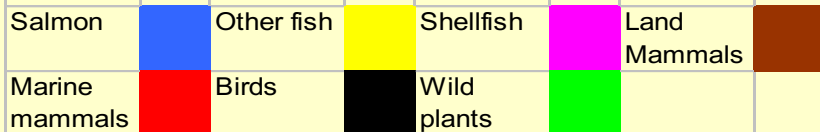
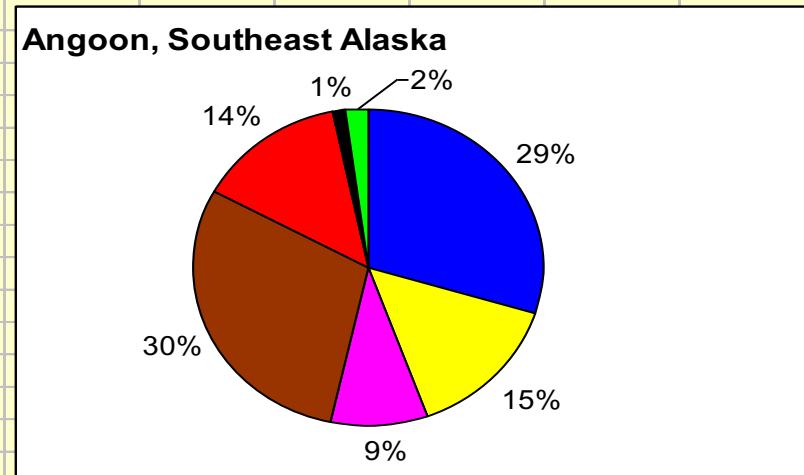
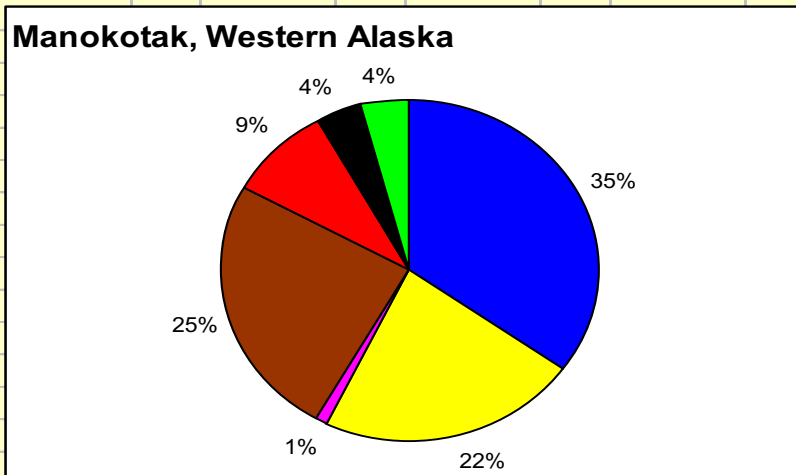
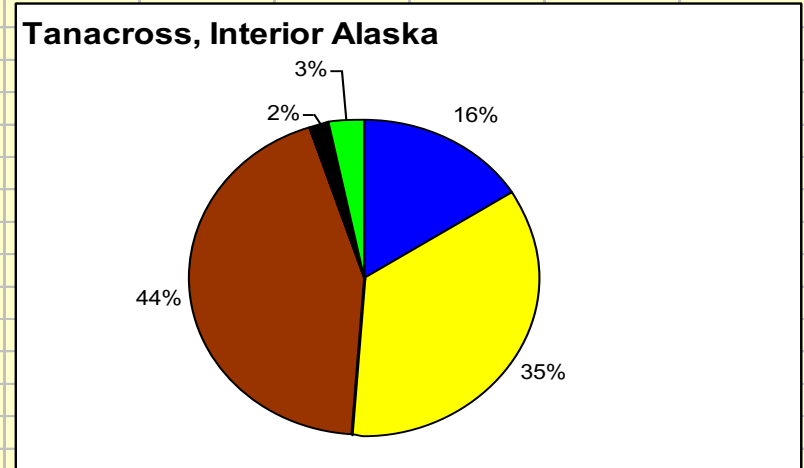
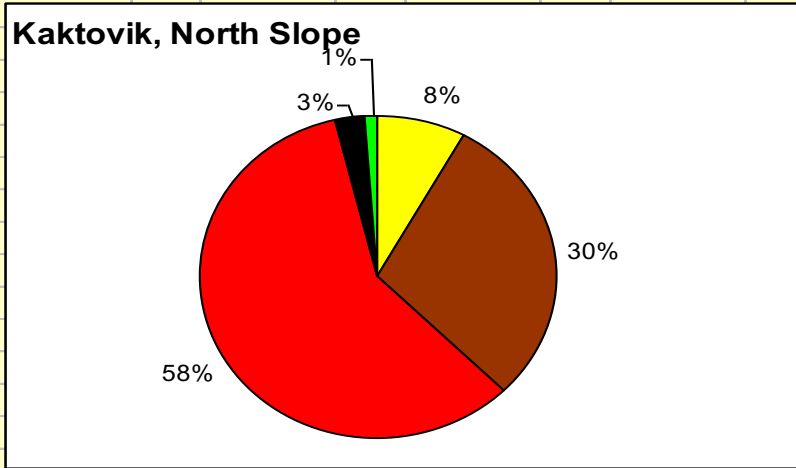




# Processing Sockeye Salmon



# Composition of Subsistence Harvests Across the State

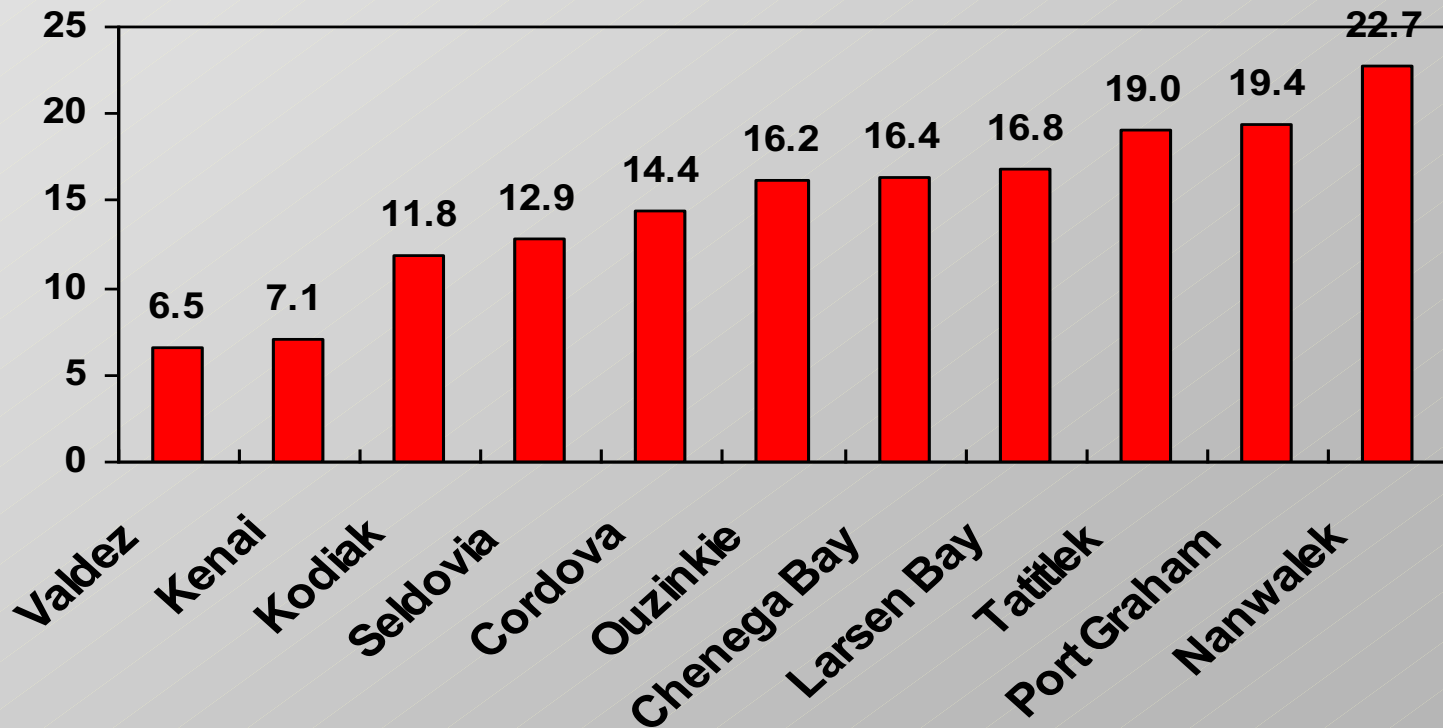


# Pulling a King Salmon from a Fishwheel on the Copper River



# Diversity of Subsistence Harvests

Average Number of Kinds of Resources Used per Household, Selected Communities, 1993



# Processing King Salmon, Copper River



# Levels of Involvement in Subsistence Uses

Percent of Households Participating in Subsistence Activities in Rural Areas				
	Harvesting	Using	Harvesting	Using
<u>Area</u>	<u>Game</u>	<u>Game</u>	<u>Fish</u>	<u>Fish</u>
Arctic	63%	92%	78%	96%
Interior	69%	88%	75%	92%
Southcentral	55%	79%	80%	94%
Southeast	48%	79%	80%	95%
Southwest	65%	90%	86%	94%
Western	70%	90%	98%	100%
<b>Total Rural</b>	<b>60%</b>	<b>86%</b>	<b>83%</b>	<b>95%</b>

# Nutritional and Other Values

	<u>Rural Areas</u>	<u>Urban Areas</u>
<b>Annual Wild Food Production, Lbs/person</b>	<b>375</b>	<b>22</b>
<b>Total Annual Wild Food Production, Lbs</b>	<b>43,714,606</b>	<b>9,740,12</b>
<b>Percent of Population's Required Protein @ 49 grams per day</b>	<b>242%</b>	<b>15%</b>
<b>Percent of Population's Required Calories @ 2400 calories per day</b>	<b>35%</b>	<b>2%</b>
<b>Replacement Value @ \$5 per pound</b>	<b>\$218,573,030</b>	<b>\$48,700,080</b>

# Harvesting Sockeye Salmon From the Copper River



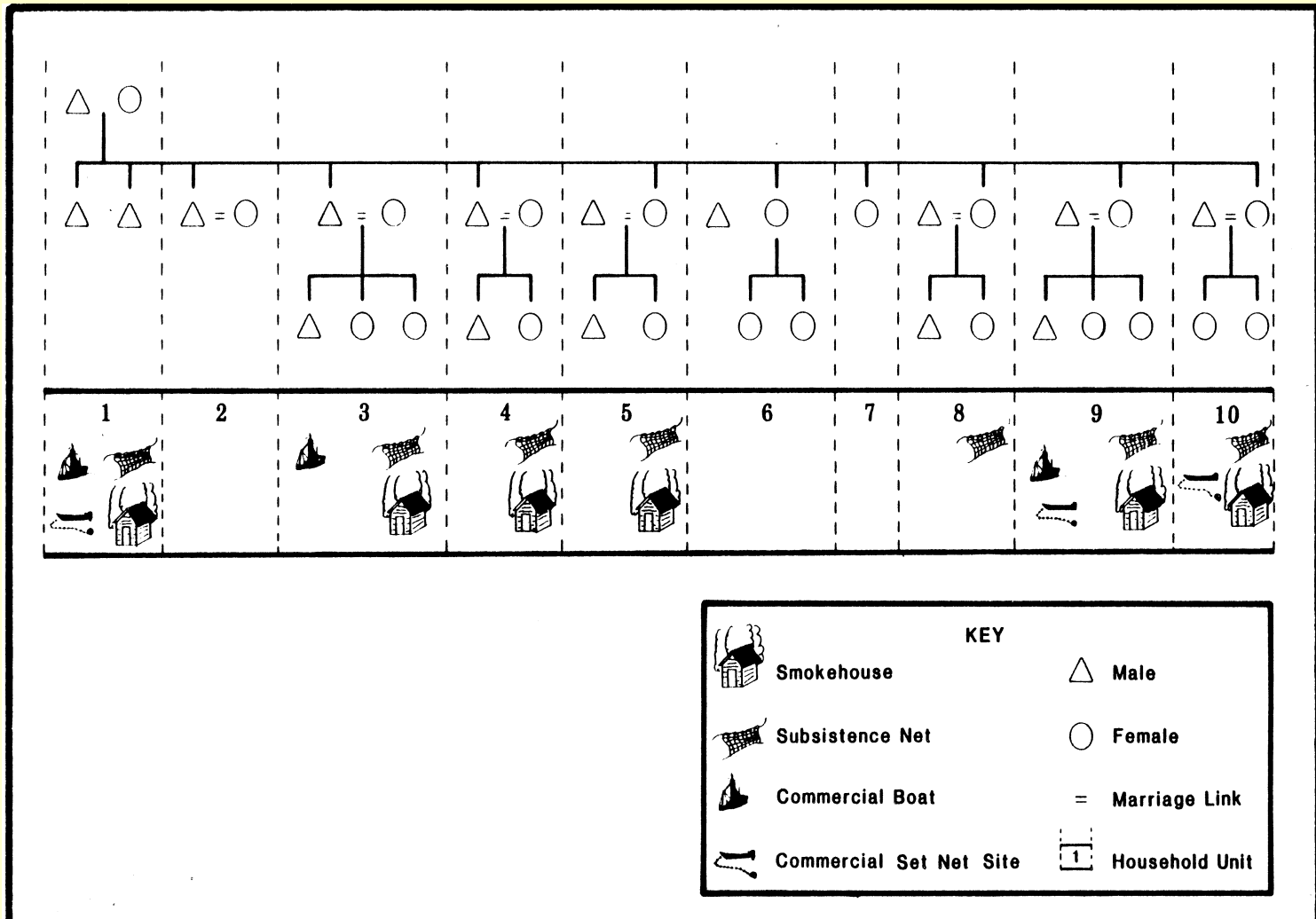


# Features, continued

- Domestic mode of production, usually based on extended kinship
- Roles defined by age, sex, and culture
- Household specialization in subsistence production
- More unstable cash sector: seasonal employment, relatively low cash incomes; cash invested in subsistence sector

# Subsistence as a Family Affair

An Extended Family at Port Graham that Cooperated in Subsistence Salmon Fishing and Processing, 1980s



# Specialization in subsistence harvests; integration of cash and subsistence sectors

## Subsistence Harvests by Income, Six Lower Yukon River Communities

<u>Household's Major Income Sources</u>	<u>Mean Household Income</u>	<u>Mean Household Harvests</u>
Wage Employment and Commercial Fishing	\$23,362	5,274lbs
Wage Employment Only	\$19,025	4,608lbs
Commercial Fishing Only	\$19,926	3,920lbs
Transfer Payments (e.g. ADC)	\$6,468	435lbs

# Unstable cash sector in local economy

## Mean Income per Income Tax Return, 1981 - 1985, Grouped by Rural and Urban Area

Urban Juneau	\$24,250
Rural southeast	\$15,402
Urban Anchorage	\$24,457
Rural southcentral	\$15,238
Urban Fairbanks	\$24,677
Rural Interior	\$12,275
Rural Southwest	\$15,147
Rural Alaska	\$15,025
Rural Western	\$9,366

# **Features, continued**

- **Kinship-based non-commercial distribution and exchange networks.**
- **Patterned, stable seasonal round of subsistence production.**
- **Traditional systems of land use and occupancy.**

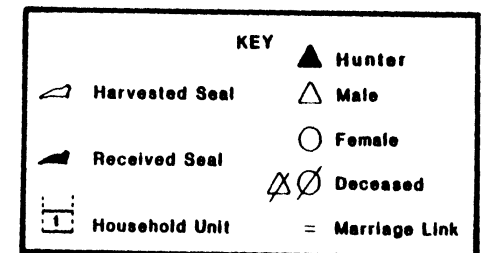
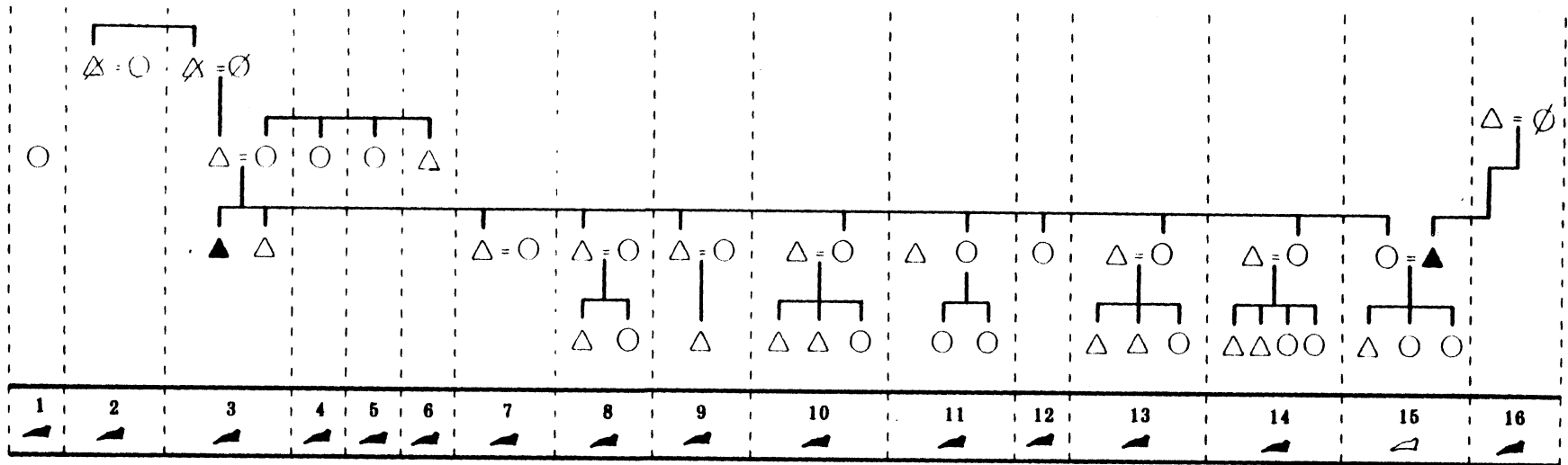
# **Features, continued**

- **Subsistence foods play important roles in social and cultural events.**
- **Complex systems of beliefs, knowledge, and values associated with resource use, passed on as cultural and oral traditions of a social group.**

# Whitefish Weir in Interior Alaska



# Non-commercial distribution of subsistence foods: extensive and kinship-based





# Patterned Seasonal Round

Seasonal Round of Harvest Activities by Residents of Chenega Bay and Tatitlek, 1980s

Resource	% of HHs * Attempting to Harvest													
	Chenega	Tatitlek	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March
Herring	16.1%	30.6%	█	█	█	█	█	█	█	█	█	█	█	█
Chitons	35.5%	19.6%	█	█	█	█	█	█	█	█	█	█	█	█
Harbor seal	67.8%	55.3%	█	█	█	█	█	█	█	█	█	█	█	█
Clams	51.5%	31.4%	█	█	█	█	█	█	█	█	█	█	█	█
Halibut	80.7%	57.5%	█	█	█	█	█	█	█	█	█	█	█	█
Herring Spaw	9.7%	71.5%	█	█	█	█	█	█	█	█	█	█	█	█
Smelt	25.8%	4.5%	█	█	█	█	█	█	█	█	█	█	█	█
Black bear	35.5%	9.6%	█	█	█	█	█	█	█	█	█	█	█	█
Seabird eggs	12.9%	39.2%	█	█	█	█	█	█	█	█	█	█	█	█
Cockles	29.0%	37.9%	█	█	█	█	█	█	█	█	█	█	█	█
Dolly Varden	12.9%	2.6%	█	█	█	█	█	█	█	█	█	█	█	█
Pacific Cod	19.4%	27.4%	█	█	█	█	█	█	█	█	█	█	█	█
King salmon	32.3%	50.6%	█	█	█	█	█	█	█	█	█	█	█	█
Sockeye	45.1%	62.8%	█	█	█	█	█	█	█	█	█	█	█	█
Shrimp	25.8%	26.1%	█	█	█	█	█	█	█	█	█	█	█	█
Wild Plants	90.4%	97.7%	█	█	█	█	█	█	█	█	█	█	█	█
Pink salmon	71.0%	72.6%	█	█	█	█	█	█	█	█	█	█	█	█
Chum salmon	54.8%	69.4%	█	█	█	█	█	█	█	█	█	█	█	█
Coho salmon	54.8%	57.3%	█	█	█	█	█	█	█	█	█	█	█	█
Deer	74.2%	75.3%	█	█	█	█	█	█	█	█	█	█	█	█
Crabs	9.7%	12.8%	█	█	█	█	█	█	█	█	█	█	█	█
Octopus	25.8%	47.5%	█	█	█	█	█	█	█	█	█	█	█	█
Goat	25.8%	14.1%	█	█	█	█	█	█	█	█	█	█	█	█
Ducks	64.5%	57.0%	█	█	█	█	█	█	█	█	█	█	█	█
Sea lion	51.7%	26.9%	█	█	█	█	█	█	█	█	█	█	█	█
Rockfish	54.8%	47.0%	█	█	█	█	█	█	█	█	█	█	█	█

█ = Usual Harvest █ = Occasional Harvest

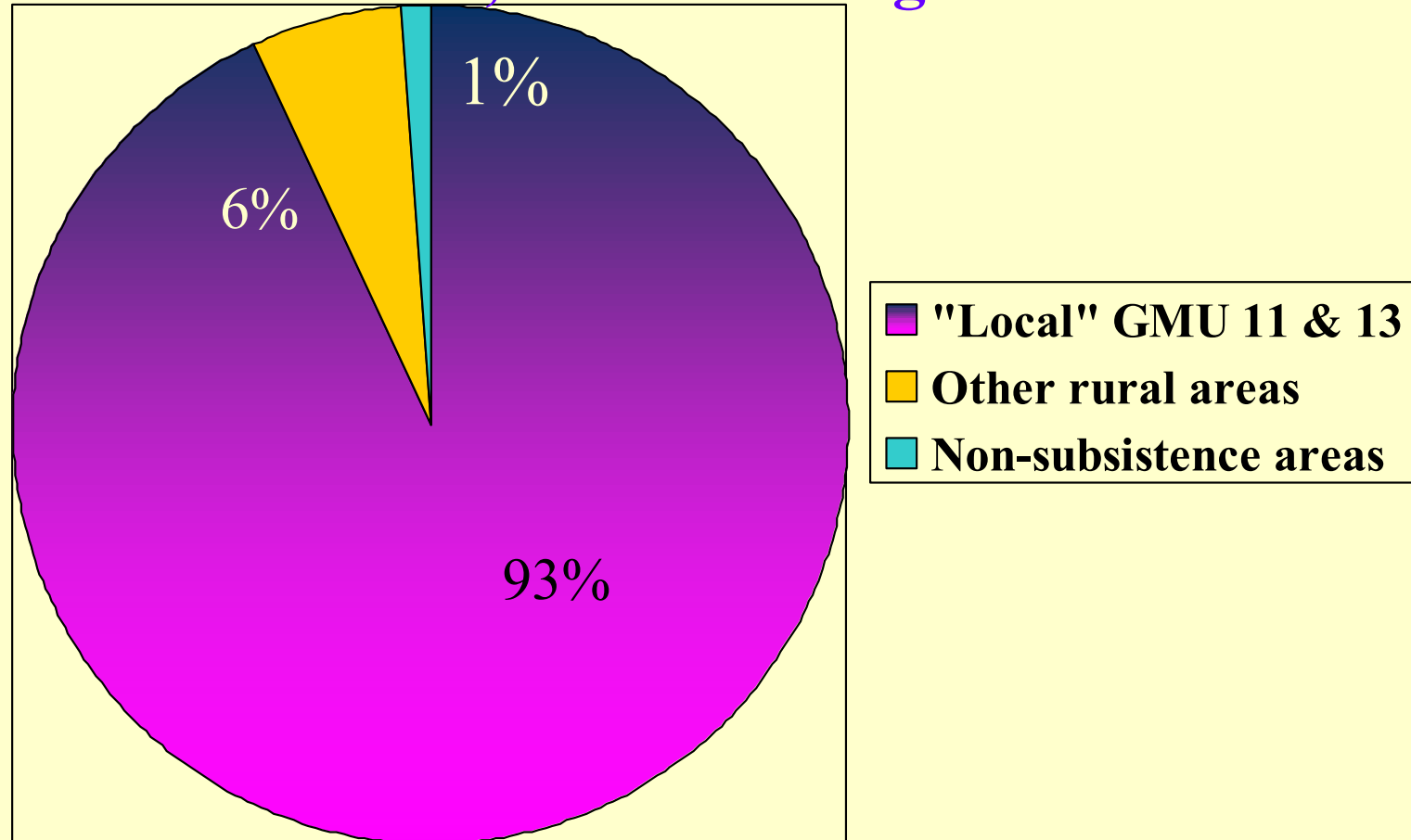
\* Average of pre-spill years

# Processing Herring, Prince William Sound



# Traditional Land Use Patterns

Location of Copper Basin Resident's  
Moose Harvests, 1992/3 through 1996/7



# Some Features of the Urban Economy

- **Corporations and non-family businesses control land, resources, and capital.**
- **Production is for the market.**
- **Labor is a commodity that is bought and sold.**
- **Laborers are compensated through wages, salaries, and pay.**
- **Work schedules determined by industrial and business schedules, not natural cycles.**

# **Additional Features of Urban Economy**

**Production, distribution, and management activities are highly stratified and specialized.**

**Food is produced by businesses and purchased by consumers with money earned through wages.**

# **Additional Features of Urban Economy**

- **Fishing and hunting are viewed either as: 1) commercial uses (commercial fishing, guiding) or 2) recreational/sport uses (intermittent breaks from work for fun).**
- **Access and regulation of fishing and hunting is by the state and/or federal governments.**

**For more information:**

**Division of Subsistence**

**Alaska Department of Fish & Game**

**PO Box 25526**

**Juneau, Alaska 99802-5526**

**907-465-4147 (Voice); 465-2066 (FAX)**

# **For more information, continued**

- **Web Page Address:  
[www.state.ak.us/local/akpages/FISH.GAME/subsist/subhome.htm](http://www.state.ak.us/local/akpages/FISH.GAME/subsist/subhome.htm)**
- **Community Profile Database (on-line)**
- **Subsistence fisheries databases**
- **Technical Paper Series (abstracts on-line)**
- **Informational leaflets and brochures**
- **ADF&G's web page has essays on subsistence uses and current issues regarding subsistence management**