

Subsistence in Rural Alaska's Mixed Economy

Prepared by:

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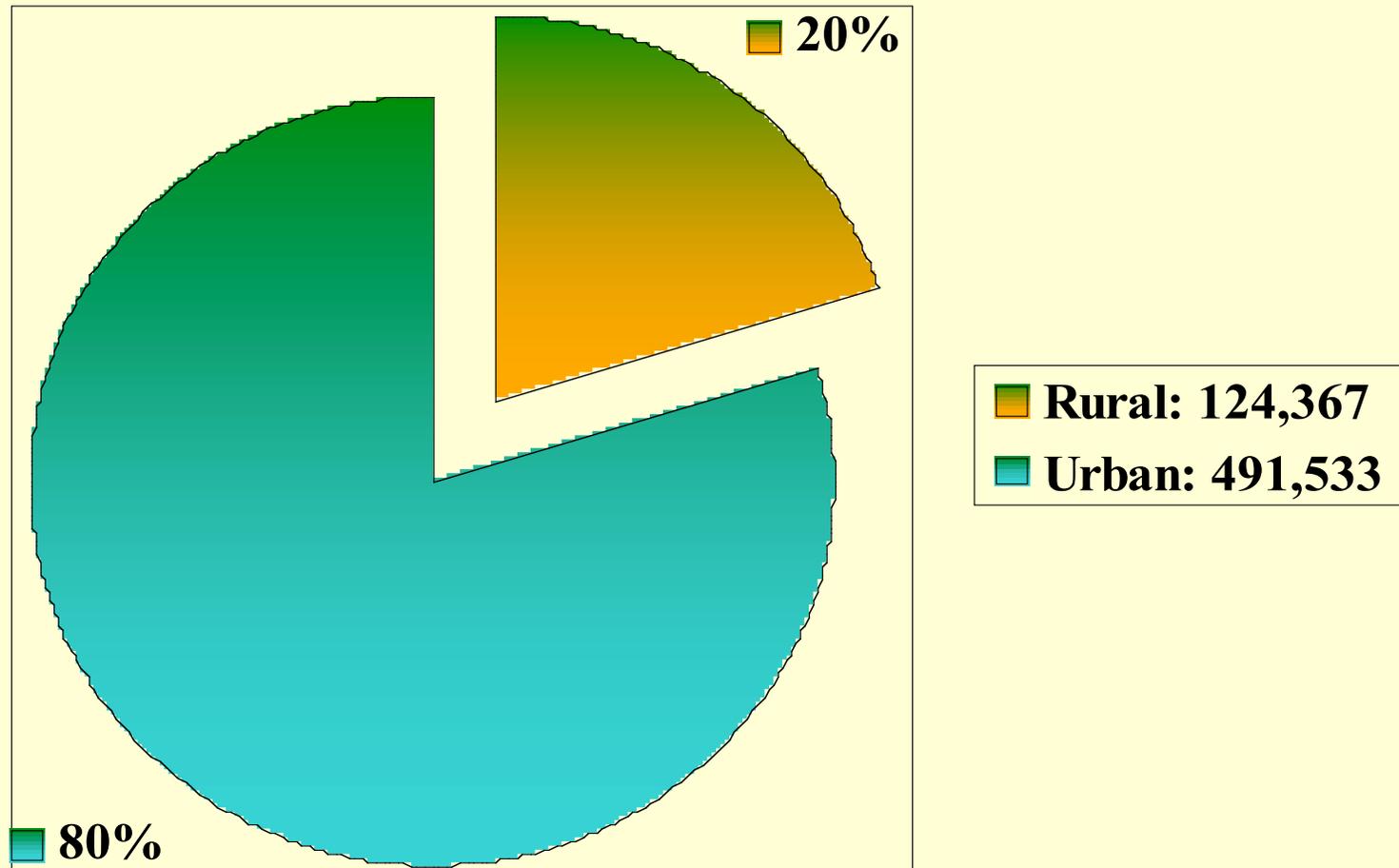
**April 2000; updated February
2001**

SUBSISTENCE DEFINED

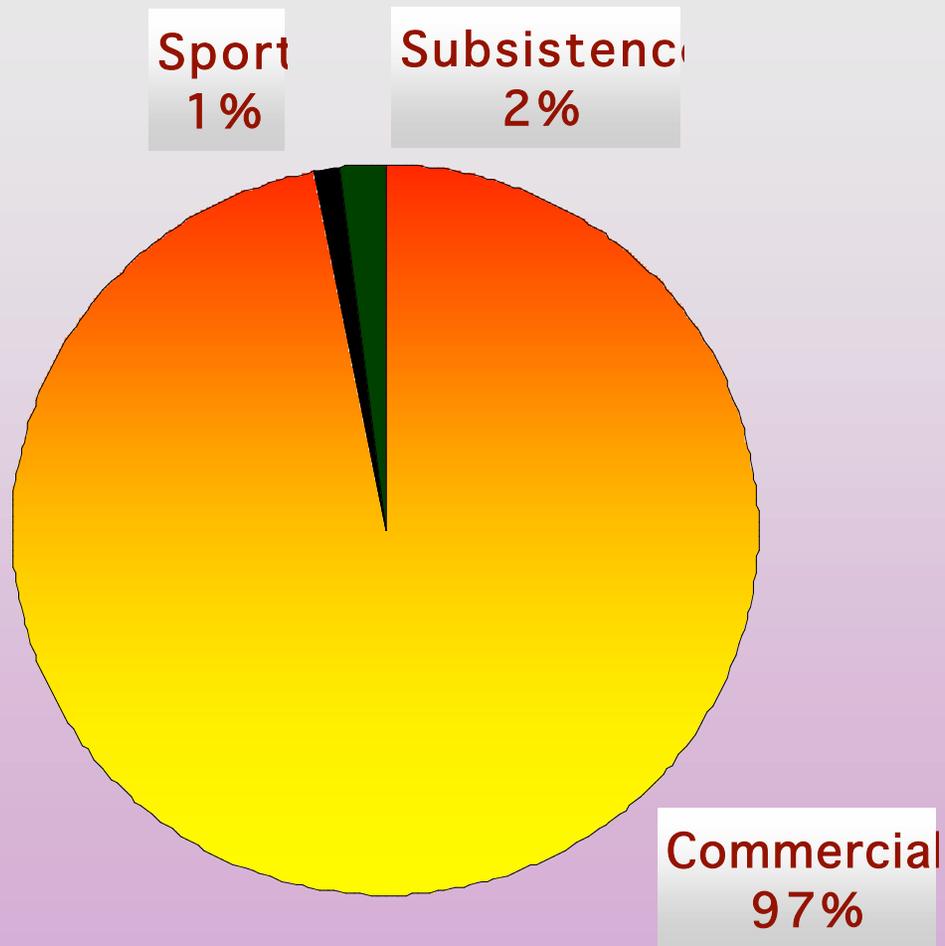
It is the “Customary and Traditional uses” of wild resources for food, clothing, fuel, transportation, construction, art, crafts, sharing, and customary trade.

Who participates in subsistence uses?

Alaska's Population by Rural and Urban, 1995



Who harvests Alaska's fish and wildlife?



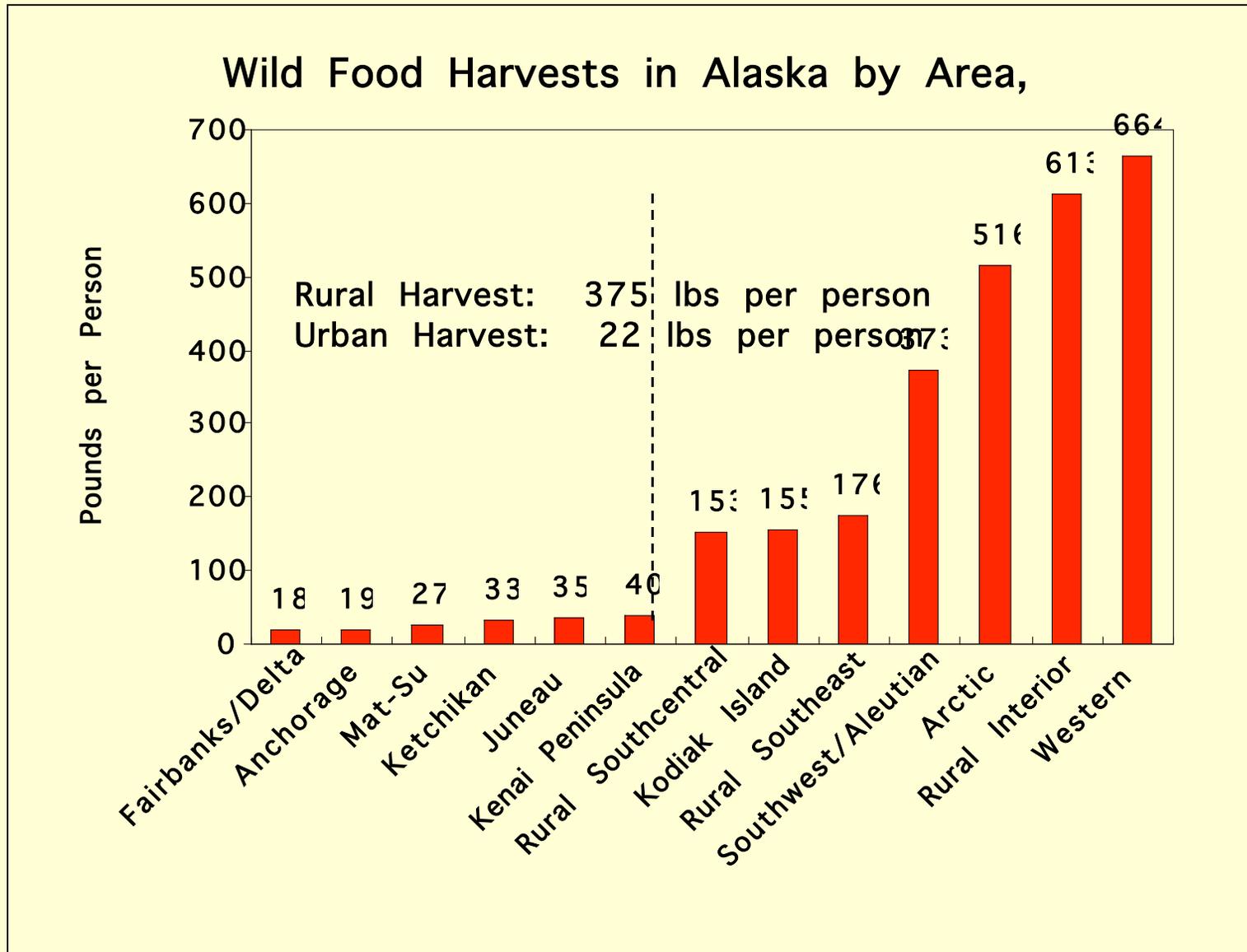
Features of Subsistence in Rural Alaska Today

- **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

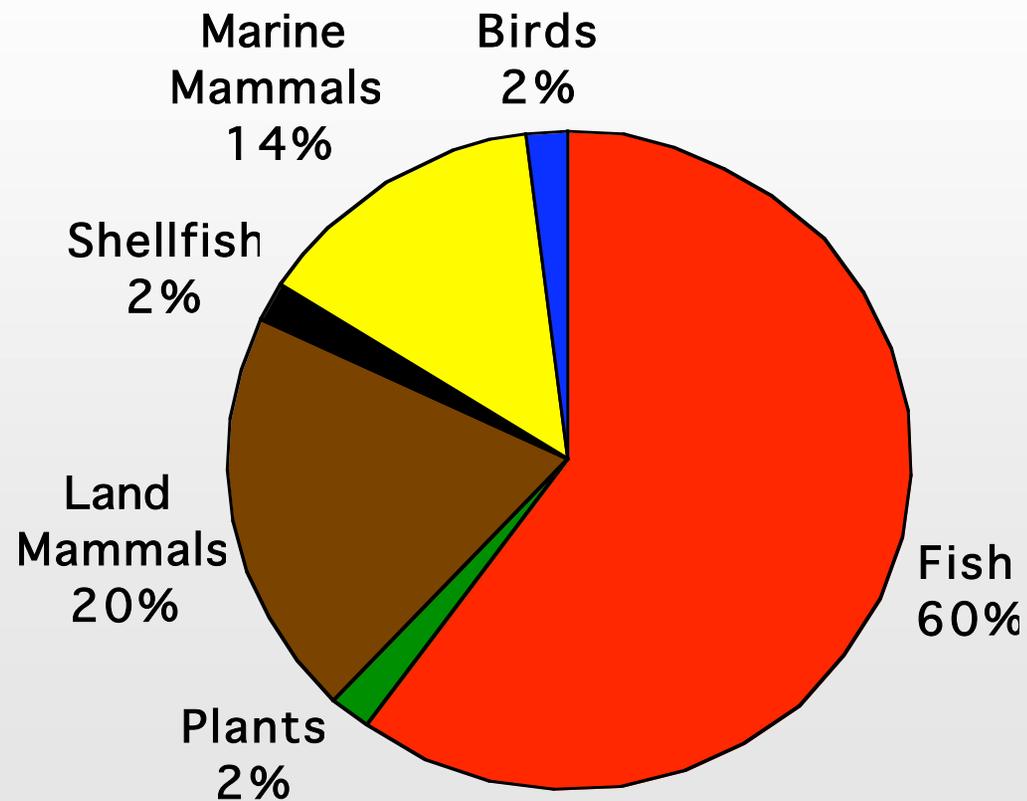


Where do Subsistence Harvests Occur?



What resources make up the subsistence harvest?

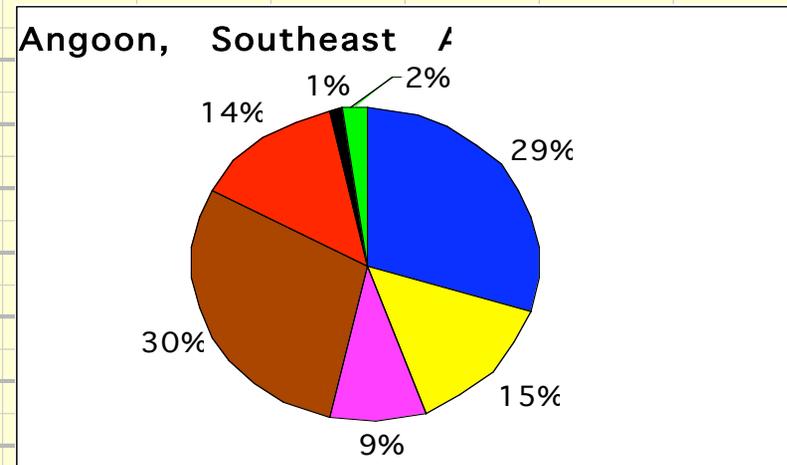
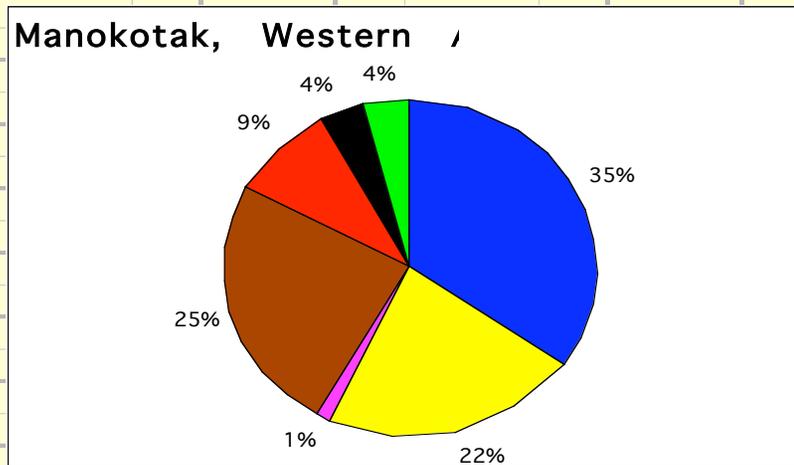
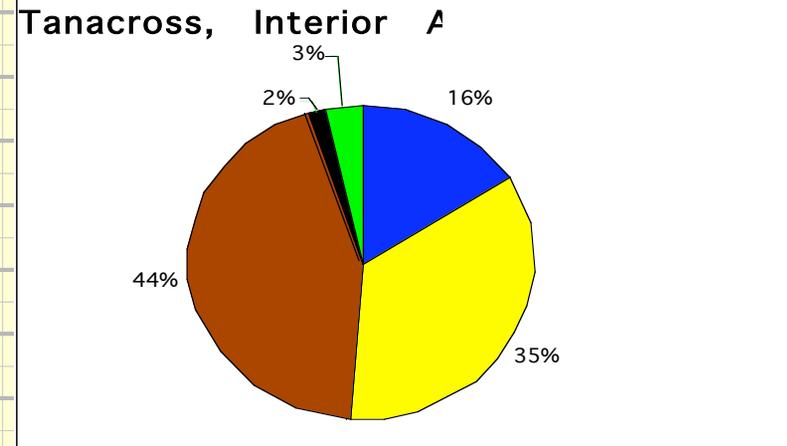
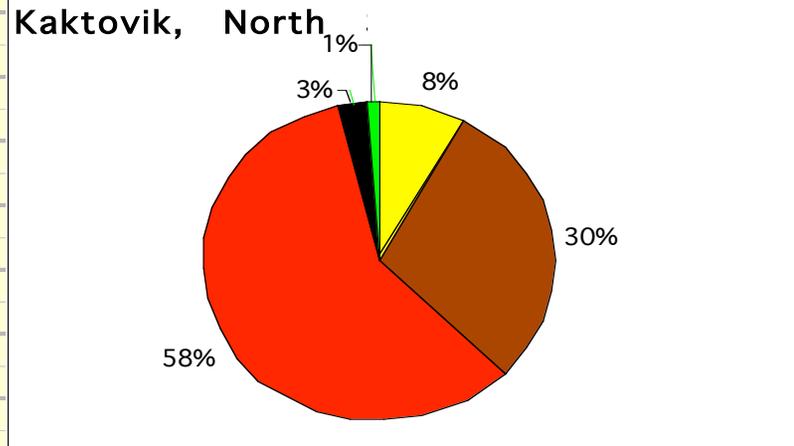
Composition of Subsistence Harvest by Rural Alaska Resident



Processing Sockeye Salmon



Composition of Subsistence Harvests Across the State

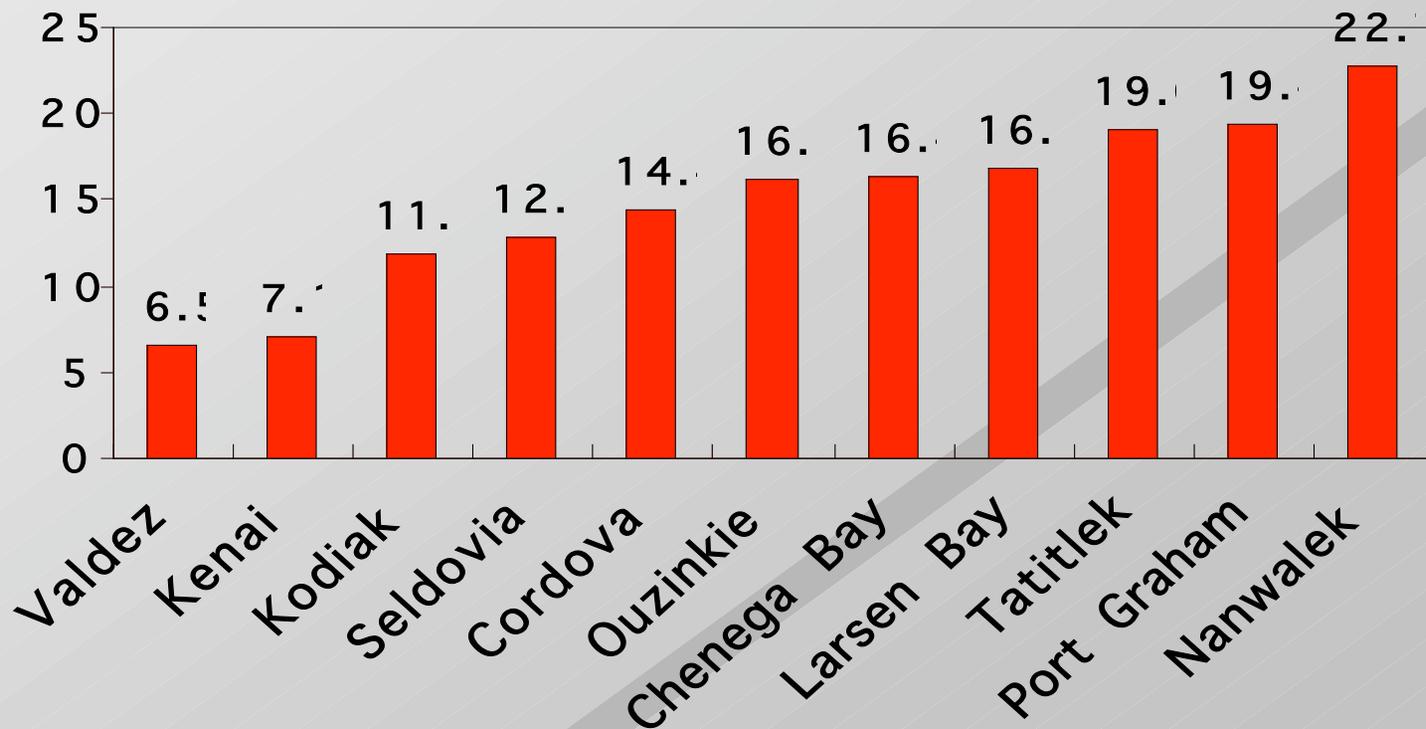


Pulling a King Salmon from a Fishwheel on the Copper River



Diversity of Subsistence Harvests

Average Number of Kinds of Resources Used per Household Selected Communities, 199



Processing King Salmon, Copper River



Levels of Involvement in Subsistence Uses

Percent of Households Participating in Subsistence Activities in Rural Areas				
<u>Area</u>	<u>Harvesting Game</u>	<u>Using Game</u>	<u>Harvesting Fish</u>	<u>Using 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%
Total Rural	60%	86%	83%	95%

Nutritional and Other Values

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

**Harvesting
Sockeye
Salmon
From the
Copper
River**

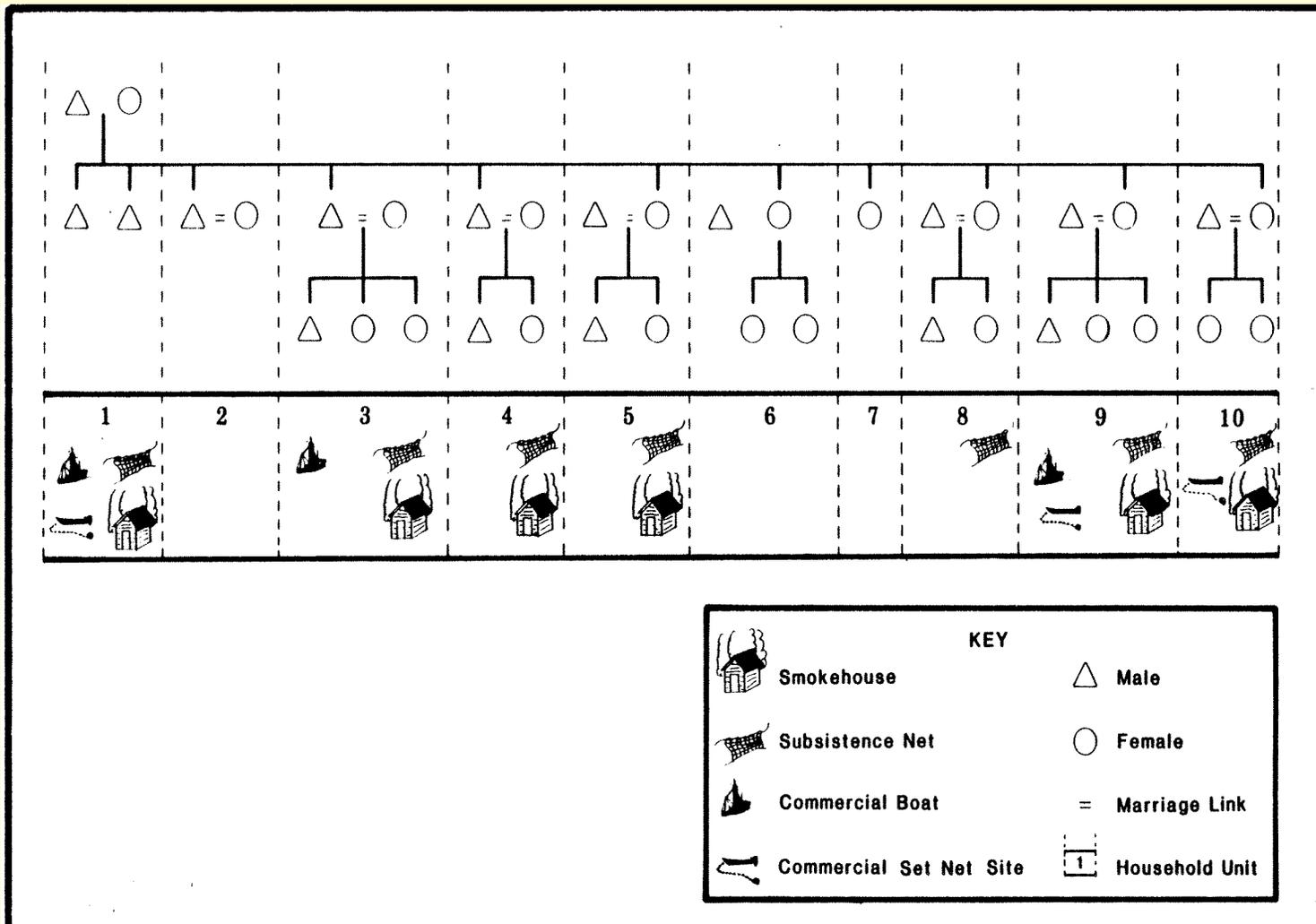


Features, continued

- 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 - 1
~~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.**

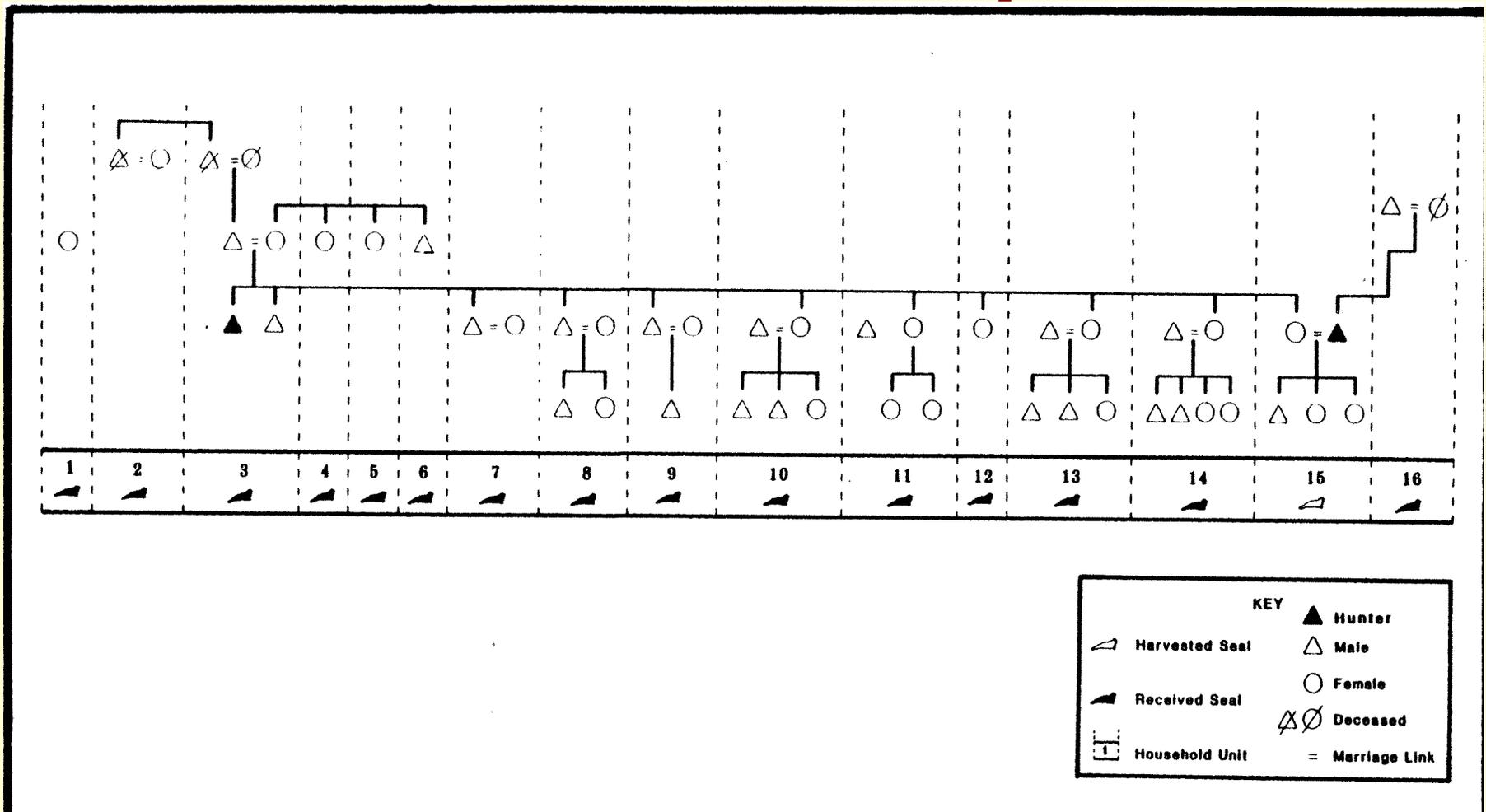
Features, continued

- 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 Tati

Resource	% of HHS * Attempting to Harvest		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

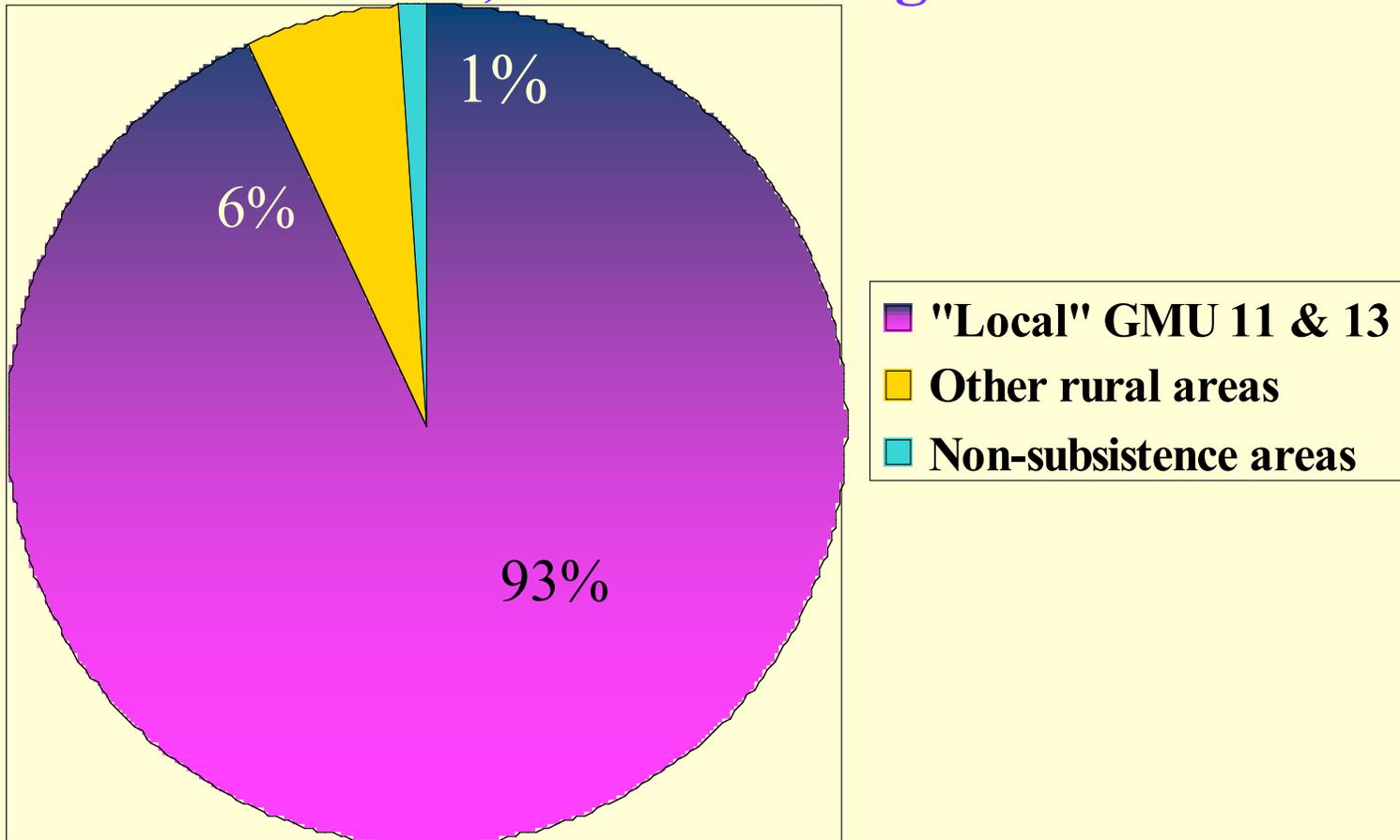
SOURCE: Fall et al. 1996

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:

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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**
- **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**