Special Publication No. SP1991-001

# Wild Food Harvest Levels by Alaska Community and Individual

by

Alaska Department of Fish and Game

1991

Alaska Department of Fish and Game Division of Subsistence

# Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

**Weights and measures (metric)**

| | |
|---|---|
| centimeter | cm |
| deciliter | dL |
| gram | g |
| hectare | ha |
| kilogram | kg |
| kilometer | km |
| liter | L |
| meter | m |
| milliliter | mL |
| millimeter | mm |

**Weights and measures (English)**

| | |
|---|---|
| cubic feet per second | $ft^3/s$ |
| foot | ft |
| gallon | gal |
| inch | in |
| mile | mi |
| nautical mile | nmi |
| ounce | oz |
| pound | lb |
| quart | qt |
| yard | yd |

**Time and temperature**

| | |
|---|---|
| day | d |
| degrees Celsius | °C |
| degrees Fahrenheit | °F |
| degrees kelvin | K |
| hour | h |
| minute | min |
| second | s |

**Physics and chemistry**

*all atomic symbols*

| | |
|---|---|
| alternating current | AC |
| ampere | A |
| calorie | cal |
| direct current | DC |
| hertz | Hz |
| horsepower | hp |
| hydrogen ion activity (negative log of) | pH |
| parts per million | ppm |
| parts per thousand | ppt, ‰ |
| volts | V |
| watts | W |

**General**

| | |
|---|---|
| Alaska Administrative Code | AAC |
| all commonly-accepted abbreviations | e.g., Mr., Mrs., AM, PM, etc. |
| all commonly-accepted professional titles | e.g., Dr., Ph.D., R.N., etc. |
| at | @ |
| compass directions: | |
| east | E |
| north | N |
| south | S |
| west | W |
| copyright | © |
| corporate suffixes: | |
| Company | Co. |
| Corporation | Corp. |
| Incorporated | Inc. |
| Limited | Ltd. |
| District of Columbia | D.C. |
| et alii (and others) | et al. |
| et cetera (and so forth) | etc. |
| exempli gratia (for example) | e.g. |
| Federal Information Code | FIC |
| id est (that is) | i.e. |
| latitude or longitude | lat. or long. |
| monetary symbols (U.S.) | $, ¢ |
| months (tables and figures) | first three letters (Jan,...,Dec) |
| registered trademark | ® |
| trademark | ™ |
| United States (adjective) | U.S. |
| United States of America (noun) | USA |
| U.S.C. | United States Code |
| U.S. state | two-letter abbreviations (e.g., AK, WA) |

**Measures (fisheries)**

| | |
|---|---|
| fork length | FL |
| mideye-to-fork | MEF |
| mideye-to-tail-fork | METF |
| standard length | SL |
| total length | TL |

**Mathematics, statistics**

*all standard mathematical signs, symbols and abbreviations*

| | |
|---|---|
| alternate hypothesis | $H_A$ |
| base of natural logarithm | e |
| catch per unit effort | CPUE |
| coefficient of variation | CV |
| common test statistics | (F, t, $\chi^2$, etc.) |
| confidence interval | CI |
| correlation coefficient (multiple) | R |
| correlation coefficient (simple) | r |
| covariance | cov |
| degree (angular ) | ° |
| degrees of freedom | df |
| expected value | E |
| greater than | > |
| greater than or equal to | ≥ |
| harvest per unit effort | HPUE |
| less than | < |
| less than or equal to | ≤ |
| logarithm (natural) | ln |
| logarithm (base 10) | log |
| logarithm (specify base) | $log_2$, etc. |
| minute (angular) | ' |
| not significant | NS |
| null hypothesis | $H_O$ |
| percent | % |
| probability | P |
| probability of a type I error (rejection of the null hypothesis when true) | α |
| probability of a type II error (acceptance of the null hypothesis when false) | β |
| second (angular) | " |
| standard deviation | SD |
| standard error | SE |
| variance | |
| population | Var |
| sample | var |

*SPECIAL PUBLICATION NO. SP1991-001*

# WILD FOOD HARVEST LEVELS BY ALASKA COMMUNITY AND INDIVIDUAL

by

Alaska Department of Fish and Game, Division of Subsistence, Anchorage

Alaska Department of Fish and Game
Division of Subsistence
333 Raspberry Road, Anchorage, AK 99518-1599

1991

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# WILD FOOD HARVEST LEVELS
# BY ALASKA COMMUNITY AND INDIVIDUAL

Division of Subsistence
Alaska Department of Fish and Game
September 15, 1991

The following tables summarize harvest levels of wild fish and game by residents of 152 communities in Alaska. These harvest levels derive from studies conducted by the Division of Subsistence, Alaska Department of Fish and Game, during the mid-1980s to the present. Harvest amounts are measured in terms of usable pounds of food, which represent the weight of the wild food product when brought into the kitchen for use. Harvests include wild fish, land mammals, marine mammals, birds, marine invertebrates, and plants. The Division does not routinely collect individual consumption levels (that is, the amounts of wild foods that finally pass through a person's mouth and into the stomach). The relationship between measures of "food production" and "food consumption" is discussed below.

## Mean Per Capita Harvests

Mean per capita harvest is a measure of the average production of wild foods per person in a community. It is calculated by dividing the total wild food harvests within a community by the total number of people in a community.

For relatively small, culturally homogeneous communities in rural areas, "mean per capita harvest" probably is also a reasonable estimate of individual "per capita consumption" levels. This is because wild foods commonly are distributed widely between people along extended kinship networks in small, homogeneous communities, so that most community residents share in the consumption of the wild foods produced locally. For relatively larger, heterogeneous communities, "mean per capita harvest" is not a good indicator of individual "per capita consumption" levels. This is because food sharing networks commonly include only a subset of the community's population, so that a segment of the community may consume the wild foods produced locally while the rest consumes little or none.

To summarize, per capita harvest is a good overall measure of wild food production in a community. It is probably a reasonable indicator of individual wild food consumption levels in small, culturally homogeneous communities where sharing occurs, but is not a good indicator of individual consumption levels in larger, heterogeneous communities where sharing is less widespread.

## Harvests by Community

There are substantial differences between Alaska communities in terms of mean per capita harvests of wild foods, as shown in Figs. 1-4 and Tables 1-2. Estimated wild food harvests range from a low of 10 lbs per person in Anchorage up to 1,498 lbs per person in Hughes. Mean per capita harvests vary substantially by a community's location, culture, and economy (see Wolfe and Walker 1987; Wolfe and Ellanna 1984).

The lowest per capita harvests occur within the large, urbanized population centers, such as Anchorage (10 lbs), Matanuska-Susitna Borough (17 lbs), Fairbanks (22 lbs), Juneau (34 lbs), and Kenai City (37.9 lbs).

Higher per capita harvests occur within communities along the road network surrounding the urban population centers. Per capita harvests of most communities in the Copper River Basin fall between 95 to 175 lbs, such as Gakona (95.3 lbs), Glennallen (99.4 lbs), Tazlina (107.0 lbs), Cantwell (111.6 lbs), Mentasta (125.4 lbs), Kenny Lake (136.2 lbs), Gulkana (152.1 lbs), and Copper Center (173.4 lbs); a few communities are higher yet, such as McCarthy (230.2 lbs), Nabesna Road (250.0 lbs), and Chistochina (262.2 lbs). Per capita harvests of communities along the road in the Upper Tanana area include Dot Lake (115.6 lbs), Tok (149.2 lbs), Tanacross (250.0 lbs), and Northway (278.1 lbs).

Communities in the Southeast Region show a substantial range of per capita harvests, including Skagway (51.8 lbs), Saxman (89.3 lbs), Haines (103.6 lbs), Sitka (146.3 lbs), Kake (158.6 lbs), Craig (185.0 lbs), Kasaan (185.6 lbs), Petersburg (200.3 lbs), Angoon (241.5 lbs), Hoonah (387.6 lbs), and Edna Bay (517.1 lbs).

Larger per capita harvests occur in Alaska communities off the road network. For Alaska Peninsula communities, most per capita harvests range from 187.9 lbs (Chignik Bay) to 455.6 lbs (Ivanof Bay). For Bristol Bay area communities, most per capita harvests range from 242.2 lbs (Dillingham) to 865.1 lbs (Pedro Bay). For Arctic Region communities, most per capita harvests range from 195.6 lbs (Barrow) to 890.1 lbs (Point Lay). For Interior and Western region communities, off the road network, it is common to find per capita harvests above 600 lbs, such as Alakanuk (733 lbs), Nikolai (786.6 lbs), Galena (787.1 lbs) and Fort Yukon (998.8 lbs). In some communities of these regions, a portion of the subsistence fish harvest traditionally is fed to working dog teams.

**Harvests within Individual Households**

A second indicator, household per capita harvest, is a measure of the amounts of wild foods harvested by individual households within a community. Household per capita harvest is calculated by dividing the amount of wild food harvested by a household by the number of household members.

The "household per capita harvest" is a reasonably good indicator of individual "per capita consumption" levels for households which do not share wild foods or receive wild foods from outside the household. It is not a good measure of individual consumption levels for households which give or receive wild foods. As stated above, subsistence foods commonly are shared between households, especially in small, homogeneous communities. However, "household per capita harvest" may be a reasonable measure of individual consumption levels in places where sharing of wild foods is less.

Household per capita harvests for fourteen communities are displayed in Figs. 5-18. These figures show that, within a community, there are substantial differences between households in terms of mean per capita harvests of wild foods.

For instance, in Mentasta Village in 1987, 70 percent of the people lived in households which harvested less than 100 lbs per capita; 90 percent of the people lived in households which harvested less than 200 lbs per capita (see Fig. 6). The mean per capita harvest for the whole community was estimated to be 115 lbs in 1982 and 125 lbs in 1987.

As another example, in Karluk in 1982, about 7 percent of the people lived in households which harvested less than 100 lbs per capita; about 15 percent of the people lived in households which harvested less than 200 lbs per capita (see Fig. 18). The mean per capita harvest for the whole community was estimated to be 863.2 lbs in 1982, 381.0 lbs in 1986, and 250.5 lbs in 1989.

The other charts (Fig. 5-18) are read similarly. For instance, in Gulkana in 1987, 50 percent of the people lived in households which harvested less than 100 lbs per capita; about 65 percent of the people lived in households which harvested less than 200 lbs per capita (see Fig. 7). The mean per capita harvest for the whole community was estimated to be 111 lbs in 1982 and 152 lbs in 1987. In English Bay in 1987, 30 percent of the people lived in households which harvested less than 100 lbs per capita; about 50 percent of the people lived in households which harvested less than 200 lbs per capita (see Fig. 8). The mean per capita harvest for the whole community was estimated to be 147 lbs in 1981, 291 lbs in 1987, and 140 lbs in 1989. In Klawock in 1984, 40 percent of the people lived in households harvesting less than 100 lbs per capita; 70 percent of the people lived in households harvesting less than 200 lbs per capita (see Fig. 5). The mean per capita harvest for the whole community was estimated to be 223 lbs in 1984 and 235 lbs in 1987. And so forth.

**Nutritional Values of Wild Food Harvests**

Wild food harvest levels can be evaluated in terms of their contribution to a person's nutritional requirements. Table 3 lists estimated recommended dietary allowances for protein and calories, which vary by age, sex, and (for females) by pregnancy and lactation status. Tables 1 and 2 show the extent to which wild food harvests in a community contain these protein and calorie requirements. These tables assume an average requirement of 44 g protein per person per day and 2400 Kilocalories per person per day for a human population. About .422 lbs per day of wild meat-fish contain a person's average daily protein requirements. About 2.94 lbs per day of wild meat-fish contain a person's average daily Kilocalorie requirements. Wild foods are good sources of protein but poorer sources of caloric energy (Table 4).

**Table 5**
**Estimated Percent of**
**Protein Requirements**
**Contained in Wild Foods**
**(See Assumptions in Text)**

| Annual Per Capita Harvest | Percent of Protein Requirements |
|---|---|
| 15 lbs | 10% |
| 39 lbs | 25% |
| 77 lbs | 50% |
| 116 lbs | 75% |
| 154 lbs | 100% |
| 193 lbs | 125% |
| 231 lbs | 150% |

About 154 lbs of wild foods contains a person's average yearly protein requirements (Table 5). As shown in Tables 1 and 2, communities whose annual wild food harvests are greater than 154 lbs per capita are harvesting at levels that meet the populations' protein requirements.

For instance, the annual wild food harvest at Mentasta Village (125.4 lbs per capita) contains 81 percent of the population's protein requirements, and 12 percent of the population's caloric requirements.

As another example, the annual wild food harvest at Gulkana (152.1 lbs per capita) contains 99 percent of the population's protein requirements, and 14 percent of the population's caloric requirements.

As a third example, the annual wild food harvest at Klawock (235.2 lbs) contains 153 percent of the population's protein requirements, and 22 percent of the population's caloric requirements.

**Additional References**

Alaska Department of Fish and Game
1989 Alaskans' Per Capita Harvests of Wild Foods. **Alaska Fish and Game** 21(6): 14-15.

Wolfe, Robert J. and Robert Walker
1987 Subsistence Economies in Alaska: Productivity, Geography, and Development Impacts. **Arctic Anthropology** 24(2):56-81.

Wolfe, Robert J. and Linda J. Ellanna
1983 **Resource Use and Socioeconomic Systems: Case Studies of Fishing and Hunting in Alaskan Communities**. Technical Paper No. 61, Division of Subsistence, Alaska Department of Fish and Game, Juneau.

**FIG. 1. ANNUAL WILD FOOD HARVESTS (MEAN LBS PER CAPITA) BY SURVEYED COMMUNITIES WITH MEAN PER CAPITA HARVESTS LESS THAN 150 LBS**
**SOURCE: DIVISION OF SUBSISTENCE, ALASKA DEPARTMENT OF FISH AND GAME**

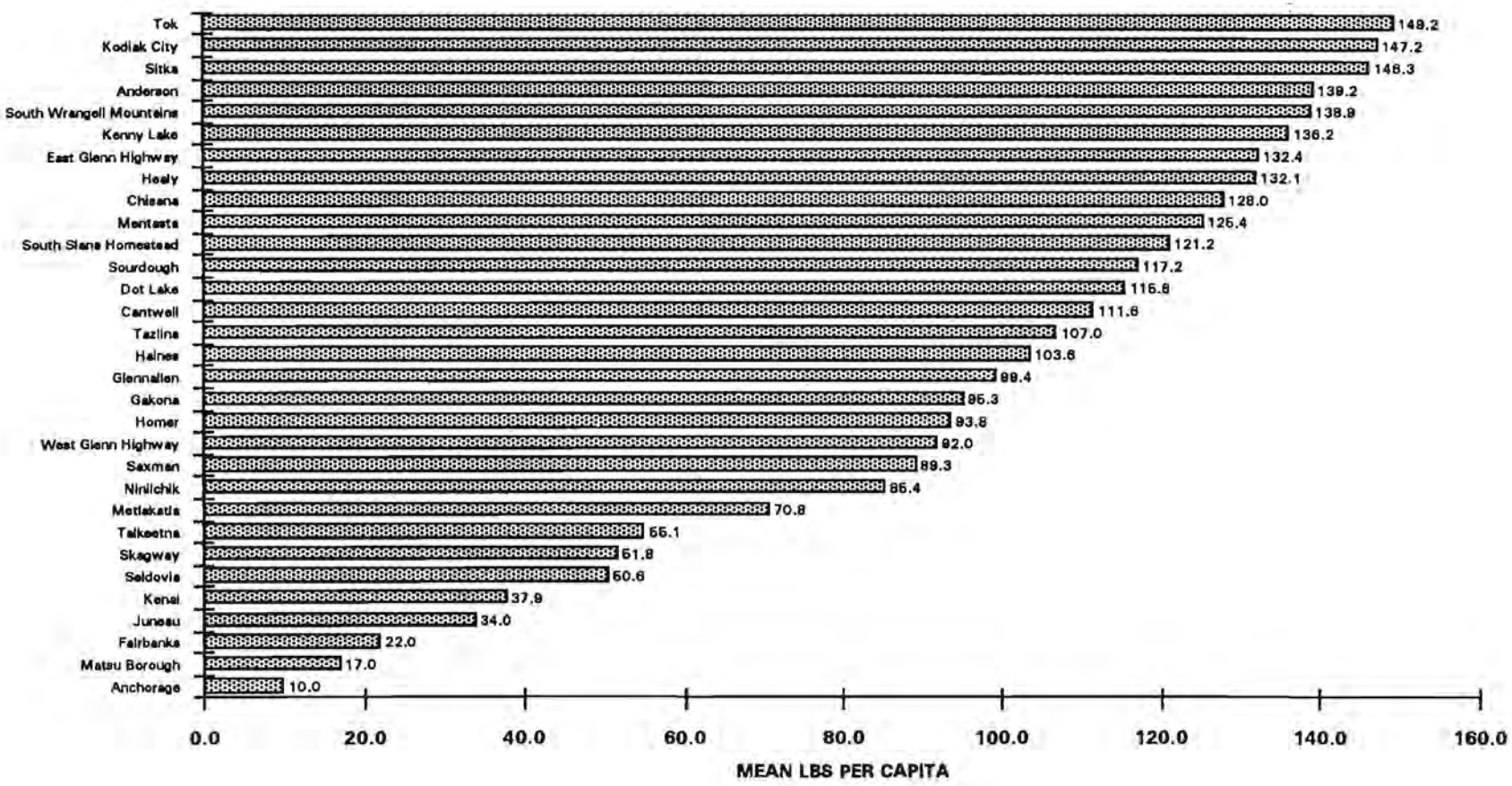


**FIG. 2. ANNUAL WILD FOOD HARVESTS (MEAN LBS PER CAPITA) BY SURVEYED COMMUNITIES WITH MEAN PER CAPITA HARVESTS 150 TO 249 LBS**
**SOURCE: DIVISION OF SUBSISTENCE, ALASKA DEPARTMENT OF FISH AND GAME**

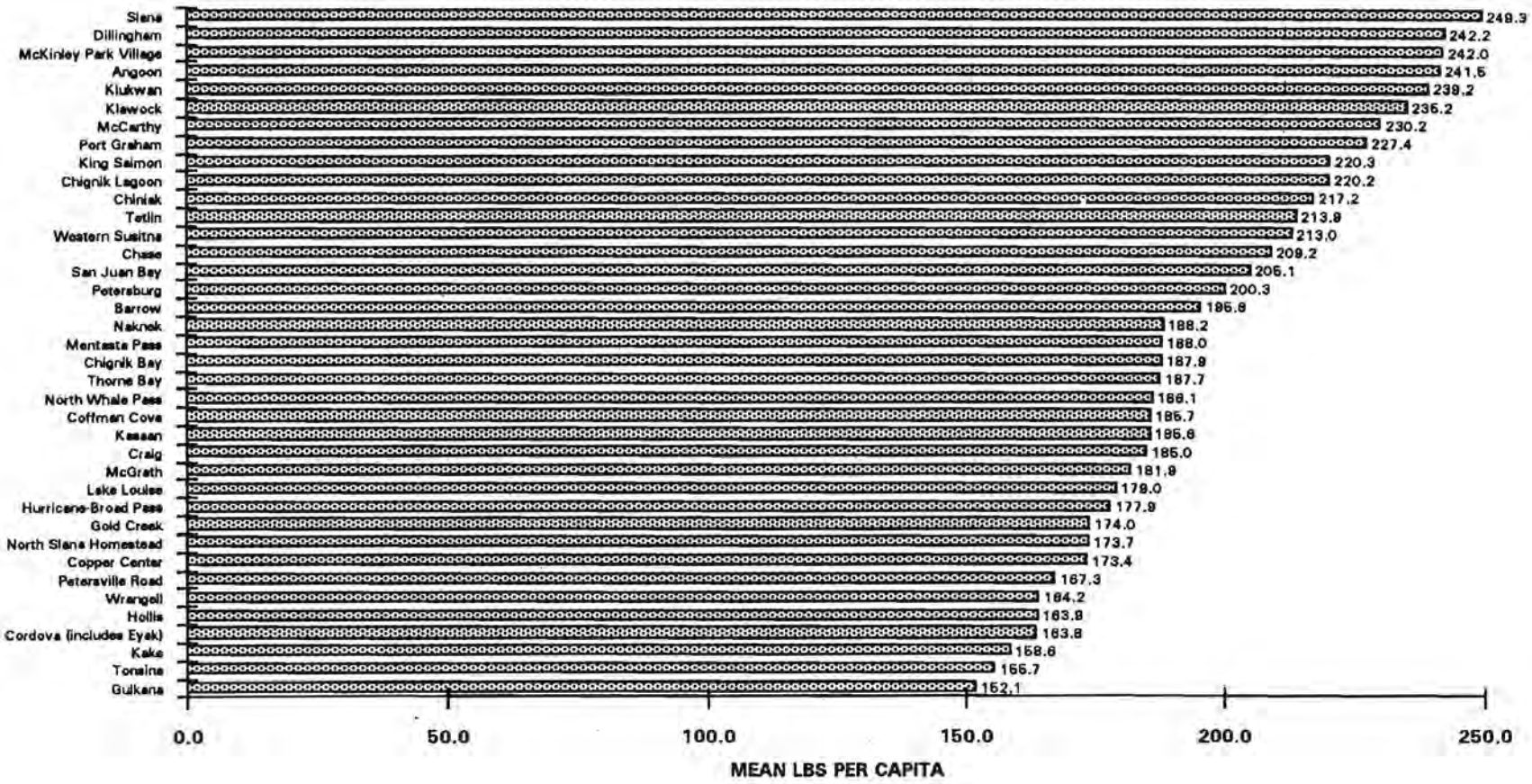


**FIG. 3. ANNUAL WILD FOOD HARVESTS (MEAN LBS PER CAPITA) BY SURVEYED COMMUNITIES WITH MEAN PER CAPITA HARVESTS 250 TO 499 LBS**
**SOURCE: DIVISION OF SUBSISTENCE, ALASKA DEPARTMENT OF FISH AND GAME**

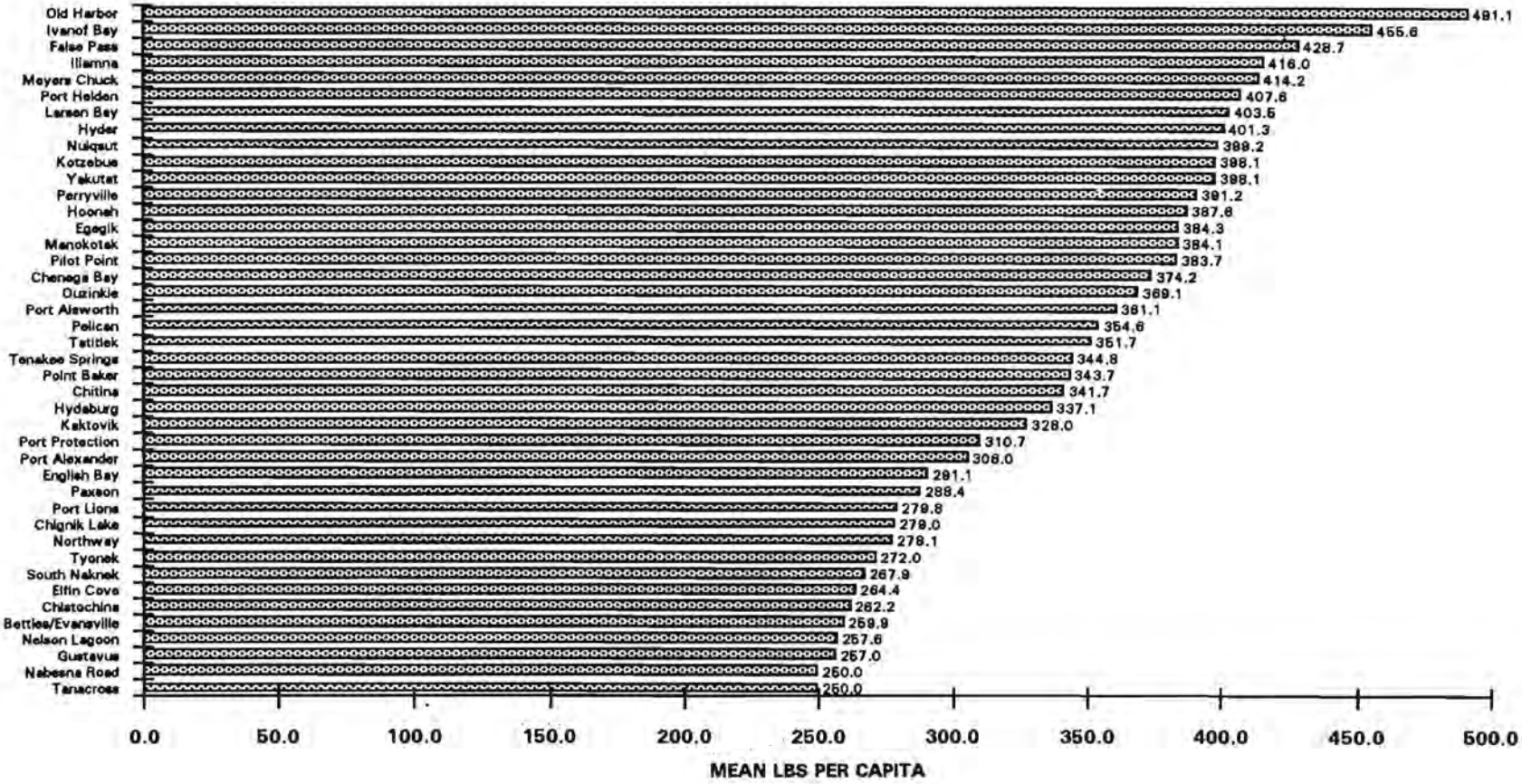


**FIG. 4. ANNUAL WILD FOOD HARVESTS (MEAN LBS PER CAPITA) BY SURVEYED COMMUNITIES WITH MEAN PER CAPITA HARVESTS GREATER THAN 500 LBS**
**SOURCE: DIVISION OF SUBSISTENCE, ALASKA DEPARTMENT OF FISH AND GAME**

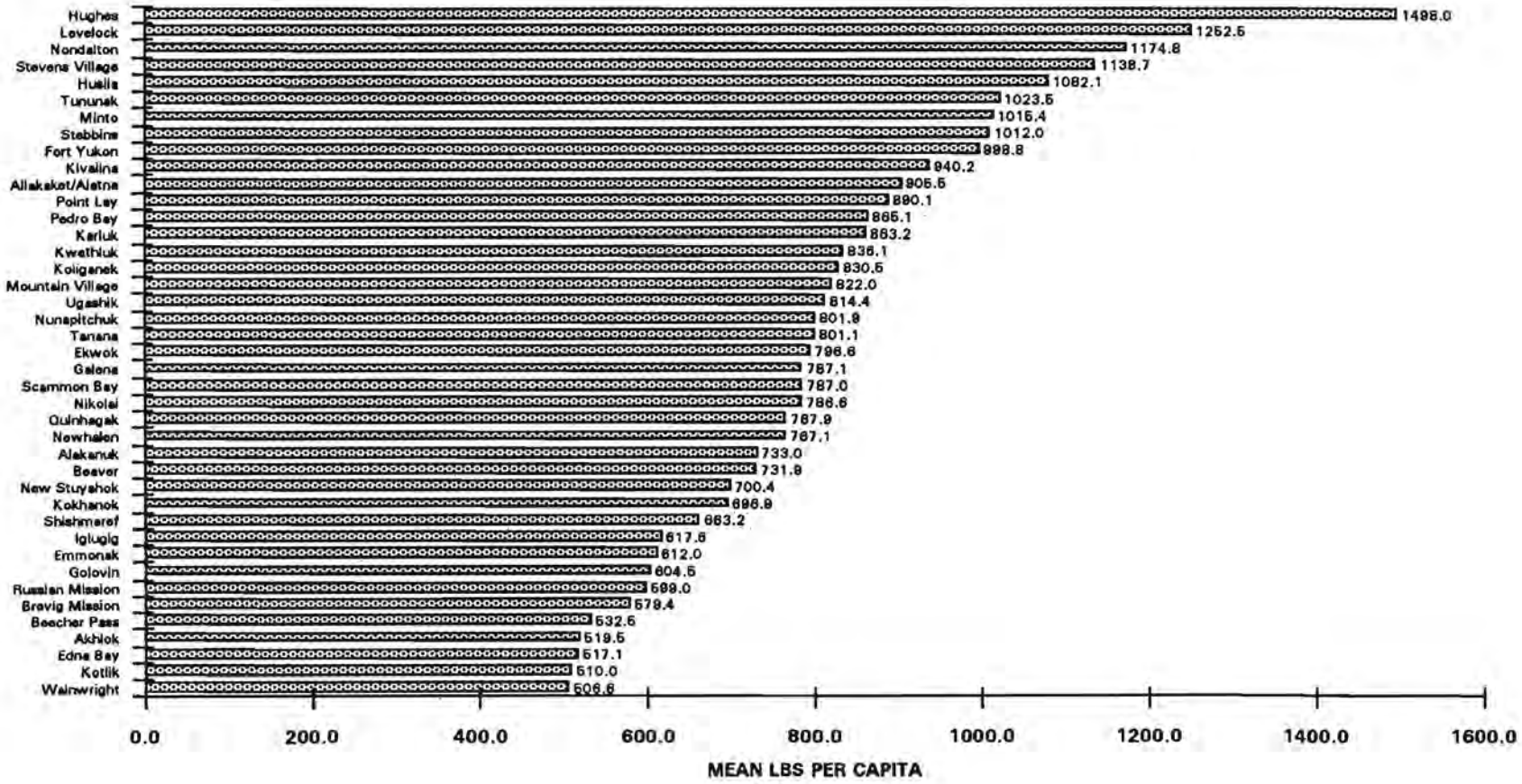


**TABLE 1. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, RANKED BY COMMUNITY HARVEST LEVEL SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| Anchorage | 84 | 10.0 | 0.03 | 6 | 1 | Southcentral |
| Matsu Borough | 84 | 17.0 | 0.05 | 11 | 2 | Southcentral |
| Fairbanks | 84 | 22.0 | 0.06 | 14 | 2 | Interior |
| Juneau | 84 | 34.0 | 0.09 | 22 | 3 | Southeast |
| Kenai | 82 | 37.9 | 0.10 | 25 | 4 | Southcentral |
| Seldovia | 82 | 50.6 | 0.14 | 33 | 5 | Southcentral |
| Skagway | 87 | 51.8 | 0.14 | 34 | 5 | Southeast |
| Talkeetna | 85 | 55.1 | 0.15 | 36 | 5 | Southcentral |
| Metlakatla | 87 | 70.8 | 0.19 | 46 | 7 | Southeast |
| Ninilchik | 82 | 85.4 | 0.23 | 55 | 8 | Southcentral |
| Saxman | 87 | 89.3 | 0.24 | 58 | 8 | Southeast |
| West Glenn Highway | 87 | 92.0 | 0.25 | 60 | 9 | Southcentral |
| Homer | 82 | 93.8 | 0.26 | 61 | 9 | Southcentral |
| Gakona | 87 | 95.3 | 0.26 | 62 | 9 | Southcentral |
| Glennallen | 87 | 99.4 | 0.27 | 65 | 9 | Southcentral |
| Haines | 87 | 103.6 | 0.28 | 67 | 10 | Southeast |
| Tazlina | 87 | 107.0 | 0.29 | 69 | 10 | Southcentral |
| Cantwell | 82 | 111.6 | 0.31 | 72 | 10 | Southcentral |
| Dot Lake | 87 | 115.6 | 0.32 | 75 | 11 | Interior |
| Sourdough | 87 | 117.2 | 0.32 | 76 | 11 | Southcentral |
| South Slana Homeste | 87 | 121.2 | 0.33 | 79 | 11 | Southcentral |
| Mentasta | 87 | 125.4 | 0.34 | 81 | 12 | Southcentral |
| Chisana | 87 | 128.0 | 0.35 | 83 | 12 | Southcentral |
| Healy | 87 | 132.1 | 0.36 | 86 | 12 | Interior |
| East Glenn Highway | 87 | 132.4 | 0.36 | 86 | 12 | Southcentral |
| Kenny Lake | 87 | 136.2 | 0.37 | 88 | 13 | Southcentral |
| South Wrangell Moun | 87 | 138.9 | 0.38 | 90 | 13 | Southcentral |
| Anderson | 87 | 139.2 | 0.38 | 90 | 13 | Interior |
| Sitka | 87 | 146.3 | 0.40 | 95 | 14 | Southeast |
| Kodiak City | 82 | 147.2 | 0.40 | 96 | 14 | Southwest |
| Tok | 87 | 149.2 | 0.41 | 97 | 14 | Interior |
| Gulkana | 87 | 152.1 | 0.42 | 99 | 14 | Southcentral |
| Tonsina | 87 | 155.7 | 0.43 | 101 | 15 | Southcentral |
| Kake | 87 | 158.6 | 0.44 | 103 | 15 | Southeast |
| Cordova (includes Eya | 85 | 163.8 | 0.45 | 106 | 15 | Southcentral |
| Hollis | 87 | 163.9 | 0.45 | 106 | 15 | Southeast |
| Wrangell | 87 | 164.2 | 0.45 | 107 | 15 | Southeast |
| Petersville Road | 85 | 167.3 | 0.46 | 109 | 16 | Southcentral |

**TABLE 1. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, RANKED BY COMMUNITY HARVEST LEVEL SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| Copper Center | 87 | 173.4 | 0.48 | 113 | 16 | Southcentral |
| North Slana Homeste | 87 | 173.7 | 0.48 | 113 | 16 | Southcentral |
| Gold Creek | 86 | 174.0 | 0.48 | 113 | 16 | Southcentral |
| Hurricane-Broad Pass | 86 | 177.9 | 0.49 | 115 | 17 | Southcentral |
| Lake Louise | 87 | 179.0 | 0.49 | 116 | 17 | Southcentral |
| McGrath | 84 | 181.9 | 0.50 | 118 | 17 | Interior |
| Craig | 87 | 185.0 | 0.51 | 120 | 17 | Southeast |
| Kasaan | 87 | 185.6 | 0.51 | 120 | 17 | Southeast |
| Coffman Cove | 87 | 185.7 | 0.51 | 121 | 17 | Southeast |
| North Whale Pass | 87 | 186.1 | 0.51 | 121 | 17 | Southeast |
| Thorne Bay | 87 | 187.7 | 0.51 | 122 | 17 | Southeast |
| Chignik Bay | 84 | 187.9 | 0.51 | 122 | 18 | Southwest |
| Mentasta Pass | 87 | 188.0 | 0.52 | 122 | 18 | Southcentral |
| Naknek | 83 | 188.2 | 0.52 | 122 | 18 | Southwest |
| Barrow | 88 | 195.6 | 0.54 | 127 | 18 | Arctic-North Slope |
| Petersburg | 87 | 200.3 | 0.55 | 130 | 19 | Southeast |
| San Juan Bay | 84 | 205.1 | 0.56 | 133 | 19 | Southcentral |
| Chase | 86 | 209.2 | 0.57 | 136 | 19 | Southcentral |
| Western Susitna | 83 | 213.0 | 0.58 | 138 | 20 | Southcentral |
| Tetlin | 87 | 213.9 | 0.59 | 139 | 20 | Interior |
| Chiniak | 82 | 217.2 | 0.60 | 141 | 20 | Southwest |
| Chignik Lagoon | 84 | 220.2 | 0.60 | 143 | 21 | Southwest |
| King Salmon | 83 | 220.3 | 0.60 | 143 | 21 | Southwest |
| Port Graham | 87 | 227.4 | 0.62 | 148 | 21 | Southcentral |
| McCarthy | 87 | 230.2 | 0.63 | 149 | 21 | Southcentral |
| Klawock | 87 | 235.2 | 0.64 | 153 | 22 | Southeast |
| Klukwan | 87 | 239.2 | 0.66 | 155 | 22 | Southeast |
| Angoon | 87 | 241.5 | 0.66 | 157 | 23 | Southeast |
| McKinley Park Village | 87 | 242.0 | 0.66 | 157 | 23 | Interior |
| Dillingham | 84 | 242.2 | 0.66 | 157 | 23 | Southwest |
| Slana | 87 | 249.3 | 0.68 | 162 | 23 | Southcentral |
| Tanacross | 87 | 250.0 | 0.68 | 162 | 23 | Interior |
| Nabesna Road | 87 | 250.0 | 0.68 | 162 | 23 | Southcentral |
| Gustavus | 87 | 257.0 | 0.70 | 167 | 24 | Southeast |
| Nelson Lagoon | 87 | 257.6 | 0.71 | 167 | 24 | Southwest |
| Bettles/Evansville | 82 | 259.9 | 0.71 | 169 | 24 | Interior |
| Chistochina | 87 | 262.2 | 0.72 | 170 | 24 | Southcentral |
| Elfin Cove | 87 | 264.4 | 0.72 | 172 | 25 | Southeast |

**TABLE 1. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, RANKED BY COMMUNITY HARVEST LEVEL SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| South Naknek | 83 | 267.9 | 0.73 | 174 | 25 | Southwest |
| Tyonek | 83 | 272.0 | 0.75 | 177 | 25 | Southcentral |
| Northway | 87 | 278.1 | 0.76 | 181 | 26 | Interior |
| Chignik Lake | 84 | 279.0 | 0.76 | 181 | 26 | Southwest |
| Port Lions | 82 | 279.8 | 0.77 | 182 | 26 | Southwest |
| Paxson | 87 | 288.4 | 0.79 | 187 | 27 | Southcentral |
| English Bay | 87 | 291.1 | 0.80 | 189 | 27 | Southcentral |
| Port Alexander | 87 | 306.0 | 0.84 | 199 | 29 | Southeast |
| Port Protection | 87 | 310.7 | 0.85 | 202 | 29 | Southeast |
| Kaktovik | 86 | 328.0 | 0.90 | 213 | 31 | Arctic-North Slope |
| Hydaburg | 87 | 337.1 | 0.92 | 219 | 31 | Southeast |
| Chitina | 87 | 341.7 | 0.94 | 222 | 32 | Southcentral |
| Point Baker | 87 | 343.7 | 0.94 | 223 | 32 | Southeast |
| Tenakee Springs | 87 | 344.8 | 0.94 | 224 | 32 | Southeast |
| Tatitlek | 87 | 351.7 | 0.96 | 228 | 33 | Southcentral |
| Pelican | 87 | 354.6 | 0.97 | 230 | 33 | Southeast |
| Port Alsworth | 83 | 361.1 | 0.99 | 234 | 34 | Southwest |
| Ouzinkie | 82 | 369.1 | 1.01 | 240 | 34 | Southwest |
| Chenega Bay | 85 | 374.2 | 1.03 | 243 | 35 | Southcentral |
| Pilot Point | 87 | 383.7 | 1.05 | 249 | 36 | Southwest |
| Manokotak | 85 | 384.1 | 1.05 | 249 | 36 | Southwest |
| Egegik | 84 | 384.3 | 1.05 | 249 | 36 | Southwest |
| Hoonah | 87 | 387.6 | 1.06 | 252 | 36 | Southeast |
| Perryville | 84 | 391.2 | 1.07 | 254 | 36 | Southwest |
| Yakutat | 87 | 398.1 | 1.09 | 258 | 37 | Southeast |
| Kotzebue | 87 | 398.1 | 1.09 | 258 | 37 | Arctic-Northwest |
| Nuiqsut | 85 | 399.2 | 1.09 | 259 | 37 | Arctic-North Slope |
| Hyder | 87 | 401.3 | 1.10 | 261 | 37 | Southeast |
| Larsen Bay | 82 | 403.5 | 1.11 | 262 | 38 | Southwest |
| Port Heiden | 87 | 407.6 | 1.12 | 265 | 38 | Southwest |
| Meyers Chuck | 87 | 414.2 | 1.13 | 269 | 39 | Southeast |
| Iliamna | 83 | 416.0 | 1.14 | 270 | 39 | Southwest |
| False Pass | 88 | 428.7 | 1.17 | 278 | 40 | Southwest |
| Ivanof Bay | 84 | 455.6 | 1.25 | 296 | 42 | Southwest |
| Old Harbor | 82 | 491.1 | 1.35 | 319 | 46 | Southwest |
| Wainwright | 88 | 506.6 | 1.39 | 329 | 47 | Arctic-North Slope |
| Kotlik | 87 | 510.0 | 1.40 | 331 | 48 | Western |
| Edna Bay | 87 | 517.1 | 1.42 | 336 | 48 | Southeast |

**TABLE 1. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, RANKED BY COMMUNITY HARVEST LEVEL**
**SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| Akhiok | 82 | 519.5 | 1.42 | 337 | 48 | Southwest |
| Beecher Pass | 87 | 532.5 | 1.46 | 346 | 50 | Southeast |
| Brevig Mission | 88 | 579.4 | 1.59 | 376 | 54 | Arctic-Northwest |
| Russian Mission | 87 | 599.0 | 1.64 | 389 | 56 | Western |
| Golovin | 88 | 604.5 | 1.66 | 392 | 56 | Arctic-Northwest |
| Emmonak | 87 | 612.0 | 1.68 | 397 | 57 | Western |
| Igiugig | 83 | 617.6 | 1.69 | 401 | 58 | Southwest |
| Shishmaref | 88 | 663.2 | 1.82 | 431 | 62 | Arctic-Northwest |
| Kokhanok | 83 | 696.9 | 1.91 | 452 | 65 | Southwest |
| New Stuyahok | 87 | 700.4 | 1.92 | 455 | 65 | Southwest |
| Beaver | 85 | 731.9 | 2.01 | 475 | 68 | Interior |
| Alakanuk | 87 | 733.0 | 2.01 | 476 | 68 | Western |
| Newhalen | 83 | 767.1 | 2.10 | 498 | 71 | Southwest |
| Quinhagak | 82 | 767.9 | 2.10 | 499 | 72 | Western |
| Nikolai | 84 | 786.6 | 2.16 | 511 | 73 | Interior |
| Scammon Bay | 87 | 787.0 | 2.16 | 511 | 73 | Western |
| Galena | 85 | 787.1 | 2.16 | 511 | 73 | Interior |
| Ekwok | 87 | 796.6 | 2.18 | 517 | 74 | Southwest |
| Tanana | 87 | 801.1 | 2.19 | 520 | 75 | Interior |
| Nunapitchuk | 87 | 801.9 | 2.20 | 521 | 75 | Western |
| Ugashik | 87 | 814.4 | 2.23 | 529 | 76 | Southwest |
| Mountain Village | 87 | 822.0 | 2.25 | 534 | 77 | Western |
| Koliganek | 87 | 830.5 | 2.28 | 539 | 77 | Southwest |
| Kwethluk | 86 | 836.1 | 2.29 | 543 | 78 | Western |
| Karluk | 82 | 863.2 | 2.36 | 560 | 80 | Southwest |
| Pedro Bay | 83 | 865.1 | 2.37 | 562 | 81 | Southwest |
| Point Lay | 87 | 890.1 | 2.44 | 578 | 83 | Arctic-North Slope |
| Allakaket/Alatna | 82 | 905.5 | 2.48 | 588 | 84 | Interior |
| Kivalina | 83 | 940.2 | 2.58 | 610 | 88 | Arctic-Northwest |
| Fort Yukon | 87 | 998.8 | 2.74 | 648 | 93 | Interior |
| Stebbins | 80 | 1012.0 | 2.77 | 657 | 94 | Western |
| Minto | 84 | 1015.4 | 2.78 | 659 | 95 | Interior |
| Tununak | 87 | 1023.5 | 2.80 | 664 | 95 | Western |
| Huslia | 83 | 1082.1 | 2.96 | 703 | 101 | Interior |
| Stevens Village | 84 | 1138.7 | 3.12 | 739 | 106 | Interior |
| Nondalton | 83 | 1174.8 | 3.22 | 763 | 109 | Southwest |
| Levelock | 89 | 1252.5 | 3.43 | 813 | 117 | Southwest |
| Hughes | 82 | 1498.0 | 4.10 | 973 | 140 | Interior |

**TABLE 2. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, BY ALASKA COMMUNITY AND AREA SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| **SOUTHEAST ARCHIPELAGO** | | | | | | |
| Angoon | 87 | 241.5 | 0.66 | 157 | 23 | Southeast |
| Beecher Pass | 87 | 532.5 | 1.46 | 346 | 50 | Southeast |
| Coffman Cove | 87 | 185.7 | 0.51 | 121 | 17 | Southeast |
| Craig | 87 | 185.0 | 0.51 | 120 | 17 | Southeast |
| Edna Bay | 87 | 517.1 | 1.42 | 336 | 48 | Southeast |
| Elfin Cove | 87 | 264.4 | 0.72 | 172 | 25 | Southeast |
| Gustavus | 87 | 257.0 | 0.70 | 167 | 24 | Southeast |
| Haines | 87 | 103.6 | 0.28 | 67 | 10 | Southeast |
| Hollis | 87 | 163.9 | 0.45 | 106 | 15 | Southeast |
| Hoonah | 87 | 387.6 | 1.06 | 252 | 36 | Southeast |
| Hydaburg | 87 | 337.1 | 0.92 | 219 | 31 | Southeast |
| Hyder | 87 | 401.3 | 1.10 | 261 | 37 | Southeast |
| Juneau | 84 | 34.0 | 0.09 | 22 | 3 | Southeast |
| Kake | 87 | 158.6 | 0.44 | 103 | 15 | Southeast |
| Kasaan | 87 | 185.6 | 0.51 | 120 | 17 | Southeast |
| Klawock | 87 | 235.2 | 0.64 | 153 | 22 | Southeast |
| Klukwan | 87 | 239.2 | 0.66 | 155 | 22 | Southeast |
| Metlakatla | 87 | 70.8 | 0.19 | 46 | 7 | Southeast |
| Meyers Chuck | 87 | 414.2 | 1.13 | 269 | 39 | Southeast |
| North Whale Pass | 87 | 186.1 | 0.51 | 121 | 17 | Southeast |
| Pelican | 87 | 354.6 | 0.97 | 230 | 33 | Southeast |
| Petersburg | 87 | 200.3 | 0.55 | 130 | 19 | Southeast |
| Point Baker | 87 | 343.7 | 0.94 | 223 | 32 | Southeast |
| Port Alexander | 87 | 306.0 | 0.84 | 199 | 29 | Southeast |
| Port Protection | 87 | 310.7 | 0.85 | 202 | 29 | Southeast |
| Saxman | 87 | 89.3 | 0.24 | 58 | 8 | Southeast |
| Sitka | 87 | 146.3 | 0.40 | 95 | 14 | Southeast |
| Skagway | 87 | 51.8 | 0.14 | 34 | 5 | Southeast |
| Tenakee Springs | 87 | 344.8 | 0.94 | 224 | 32 | Southeast |
| Thorne Bay | 87 | 187.7 | 0.51 | 122 | 17 | Southeast |
| Wrangell | 87 | 164.2 | 0.45 | 107 | 15 | Southeast |
| Yakutat | 87 | 398.1 | 1.09 | 258 | 37 | Southeast |
| **ANCHORAGE-MATSU** | | | | | | |
| Anchorage | 84 | 10.0 | 0.03 | 6 | 1 | Southcentral |
| Matsu Borough | 84 | 17.0 | 0.05 | 11 | 2 | Southcentral |
| Petersville Road | 85 | 167.3 | 0.46 | 109 | 16 | Southcentral |
| Talkeetna | 85 | 55.1 | 0.15 | 36 | 5 | Southcentral |

**TABLE 2. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, BY ALASKA COMMUNITY AND AREA SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| **KENAI PENINSULA** | | | | | | |
| English Bay | 87 | 291.1 | 0.80 | 189 | 27 | Southcentral |
| Homer | 82 | 93.8 | 0.26 | 61 | 9 | Southcentral |
| Kenai | 82 | 37.9 | 0.10 | 25 | 4 | Southcentral |
| Ninilchik | 82 | 85.4 | 0.23 | 55 | 8 | Southcentral |
| Port Graham | 87 | 227.4 | 0.62 | 148 | 21 | Southcentral |
| Saldovia | 82 | 50.6 | 0.14 | 33 | 5 | Southcentral |
| **PRINCE WILLIAM SOUND** | | | | | | |
| Chenega Bay | 85 | 374.2 | 1.03 | 243 | 35 | Southcentral |
| Cordova (includes Eya | 85 | 163.8 | 0.45 | 106 | 15 | Southcentral |
| San Juan Bay | 84 | 205.1 | 0.56 | 133 | 19 | Southcentral |
| Tatitlek | 87 | 351.7 | 0.96 | 228 | 33 | Southcentral |
| **KODIAK ISLAND** | | | | | | |
| Akhiok | 82 | 519.5 | 1.42 | 337 | 48 | Southwest |
| Chiniak | 82 | 217.2 | 0.60 | 141 | 20 | Southwest |
| Karluk | 82 | 863.2 | 2.36 | 560 | 80 | Southwest |
| Kodiak City | 82 | 147.2 | 0.40 | 96 | 14 | Southwest |
| Larsen Bay | 82 | 403.5 | 1.11 | 262 | 38 | Southwest |
| Old Harbor | 82 | 491.1 | 1.35 | 319 | 46 | Southwest |
| Ouzinkie | 82 | 369.1 | 1.01 | 240 | 34 | Southwest |
| Port Lions | 82 | 279.8 | 0.77 | 182 | 26 | Southwest |
| **ALASKA PENINSULA** | | | | | | |
| Chignik Bay | 84 | 187.9 | 0.51 | 122 | 18 | Southwest |
| Chignik Lagoon | 84 | 220.2 | 0.60 | 143 | 21 | Southwest |
| Chignik Lake | 84 | 279.0 | 0.76 | 181 | 26 | Southwest |
| Egegik | 84 | 384.3 | 1.05 | 249 | 36 | Southwest |
| False Pass | 88 | 428.7 | 1.17 | 278 | 40 | Southwest |
| Ivanof Bay | 84 | 455.6 | 1.25 | 296 | 42 | Southwest |
| King Salmon | 83 | 220.3 | 0.60 | 143 | 21 | Southwest |
| Naknek | 83 | 188.2 | 0.52 | 122 | 18 | Southwest |
| Nelson Lagoon | 87 | 257.6 | 0.71 | 167 | 24 | Southwest |
| Perryville | 84 | 391.2 | 1.07 | 254 | 36 | Southwest |
| Pilot Point | 87 | 383.7 | 1.05 | 249 | 36 | Southwest |
| Port Heiden | 87 | 407.6 | 1.12 | 265 | 38 | Southwest |
| South Naknek | 83 | 267.9 | 0.73 | 174 | 25 | Southwest |
| Ugashik | 87 | 814.4 | 2.23 | 529 | 76 | Southwest |

**TABLE 2. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, BY ALASKA COMMUNITY AND AREA SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| **BRISTOL BAY** | | | | | | |
| Dillingham | 84 | 242.2 | 0.66 | 157 | 23 | Southwest |
| Ekwok | 87 | 796.6 | 2.18 | 517 | 74 | Southwest |
| Igiugig | 83 | 617.6 | 1.69 | 401 | 58 | Southwest |
| Iliamna | 83 | 416.0 | 1.14 | 270 | 39 | Southwest |
| Kokhanok | 83 | 696.9 | 1.91 | 452 | 65 | Southwest |
| Koliganek | 87 | 830.5 | 2.28 | 539 | 77 | Southwest |
| Levelock | 89 | 1252.5 | 3.43 | 813 | 117 | Southwest |
| Manokotak | 85 | 384.1 | 1.05 | 249 | 36 | Southwest |
| New Stuyahok | 87 | 700.4 | 1.92 | 455 | 65 | Southwest |
| Newhalen | 83 | 767.1 | 2.10 | 498 | 71 | Southwest |
| Nondalton | 83 | 1174.8 | 3.22 | 763 | 109 | Southwest |
| Pedro Bay | 83 | 865.1 | 2.37 | 562 | 81 | Southwest |
| Port Alsworth | 83 | 361.1 | 0.99 | 234 | 34 | Southwest |
| **YUKON-KUSKOKWIM DELTA** | | | | | | |
| Alakanuk | 87 | 733.0 | 2.01 | 476 | 68 | Western |
| Emmonak | 87 | 612.0 | 1.68 | 397 | 57 | Western |
| Kotlik | 87 | 510.0 | 1.40 | 331 | 48 | Western |
| Kwethluk | 86 | 836.1 | 2.29 | 543 | 78 | Western |
| Mountain Village | 87 | 822.0 | 2.25 | 534 | 77 | Western |
| Nunapitchuk | 87 | 801.9 | 2.20 | 521 | 75 | Western |
| Quinhagak | 82 | 767.9 | 2.10 | 499 | 72 | Western |
| Russian Mission | 87 | 599.0 | 1.64 | 389 | 56 | Western |
| Scammon Bay | 87 | 787.0 | 2.16 | 511 | 73 | Western |
| Tununak | 87 | 1023.5 | 2.80 | 664 | 95 | Western |
| **UPPER COOK INLET** | | | | | | |
| Western Susitna | 83 | 213.0 | 0.58 | 138 | 20 | Southcentral |
| Tyonek | 83 | 272.0 | 0.75 | 177 | 25 | Southcentral |
| **UPPER KUSKOKWIM** | | | | | | |
| McGrath | 84 | 181.9 | 0.50 | 118 | 17 | Interior |
| Nikolai | 84 | 786.6 | 2.16 | 511 | 73 | Interior |
| **UPPER YUKON-KOYUKUK-LOWER TANANA** | | | | | | |
| Allakaket/Alatna | 82 | 905.5 | 2.48 | 588 | 84 | Interior |
| Beaver | 85 | 731.9 | 2.01 | 475 | 68 | Interior |
| Bettles/Evansville | 82 | 259.9 | 0.71 | 169 | 24 | Interior |
| Fairbanks | 84 | 22.0 | 0.06 | 14 | 2 | Interior |
| Fort Yukon | 87 | 998.8 | 2.74 | 648 | 93 | Interior |
| Galena | 85 | 787.1 | 2.16 | 511 | 73 | Interior |

**TABLE 2. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, BY ALASKA COMMUNITY AND AREA**
**SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| Hughes | 82 | 1498.0 | 4.10 | 973 | 140 | Interior |
| Huslia | 83 | 1082.1 | 2.96 | 703 | 101 | Interior |
| Minto | 84 | 1015.4 | 2.78 | 659 | 95 | Interior |
| Stevens Village | 84 | 1138.7 | 3.12 | 739 | 106 | Interior |
| Tanana | 87 | 801.1 | 2.19 | 520 | 75 | Interior |
| **UPPER TANANA** | | | | | | |
| Chisana | 87 | 128.0 | 0.35 | 83 | 12 | Southcentral |
| Dot Lake | 87 | 115.6 | 0.32 | 75 | 11 | Interior |
| Northway | 87 | 278.1 | 0.76 | 181 | 26 | Interior |
| Tanacross | 87 | 250.0 | 0.68 | 162 | 23 | Interior |
| Tetlin | 87 | 213.9 | 0.59 | 139 | 20 | Interior |
| Tok | 87 | 149.2 | 0.41 | 97 | 14 | Interior |
| **SEWARD-NORTON SOUND** | | | | | | |
| Brevig Mission | 88 | 579.4 | 1.59 | 376 | 54 | Arctic-Northwest |
| Golovin | 88 | 604.5 | 1.66 | 392 | 56 | Arctic-Northwest |
| Shishmaref | 88 | 663.2 | 1.82 | 431 | 62 | Arctic-Northwest |
| Stebbins | 80 | 1012.0 | 2.77 | 657 | 94 | Western |
| **NORTHWEST** | | | | | | |
| Kivalina | 83 | 940.2 | 2.58 | 610 | 88 | Arctic-Northwest |
| Kotzebue | 87 | 398.1 | 1.09 | 258 | 37 | Arctic-Northwest |
| **ARCTIC SLOPE** | | | | | | |
| Barrow | 88 | 195.6 | 0.54 | 127 | 18 | Arctic-North Slope |
| Kaktovik | 86 | 328.0 | 0.90 | 213 | 31 | Arctic-North Slope |
| Nuiqsut | 85 | 399.2 | 1.09 | 259 | 37 | Arctic-North Slope |
| Point Lay | 87 | 890.1 | 2.44 | 578 | 83 | Arctic-North Slope |
| Wainwright | 88 | 506.6 | 1.39 | 329 | 47 | Arctic-North Slope |
| **COPPER RIVER BASIN** | | | | | | |
| Chistochina | 87 | 262.2 | 0.72 | 170 | 24 | Southcentral |
| Chitina | 87 | 341.7 | 0.94 | 222 | 32 | Southcentral |
| Copper Center | 87 | 173.4 | 0.48 | 113 | 16 | Southcentral |
| East Glenn Highway | 87 | 132.4 | 0.36 | 86 | 12 | Southcentral |
| Gakona | 87 | 95.3 | 0.26 | 62 | 9 | Southcentral |
| Glennallen | 87 | 99.4 | 0.27 | 65 | 9 | Southcentral |
| Gulkana | 87 | 152.1 | 0.42 | 99 | 14 | Southcentral |
| Kenny Lake | 87 | 136.2 | 0.37 | 88 | 13 | Southcentral |
| Lake Louise | 87 | 179.0 | 0.49 | 116 | 17 | Southcentral |
| McCarthy | 87 | 230.2 | 0.63 | 149 | 21 | Southcentral |
| Mentasta | 87 | 125.4 | 0.34 | 81 | 12 | Southcentral |

**TABLE 2. MEAN PER CAPITA HARVESTS OF WILD FOODS AND PERCENT OF NUTRITIONAL REQUIREMENTS AVAILABLE FROM WILD FOODS, BY ALASKA COMMUNITY AND AREA SOURCE: DIVISION OF SUBSISTENCE, ADFG**

| | Study Year | Annual Harvest Mean Pounds Per capita | Daily Harvest Mean Pounds Per capita | Percent of Recommended Daily Allowance of protein (44 g or .422 lbs) | Percent of Recommended Daily Allowance of Kilocalories (2400 K or 2.94 lbs) | Region |
|---|---|---|---|---|---|---|
| Mentasta Pass | 87 | 188.0 | 0.52 | 122 | 18 | Southcentral |
| Nabesna Road | 87 | 250.0 | 0.68 | 162 | 23 | Southcentral |
| North Slana Homeste | 87 | 173.7 | 0.48 | 113 | 16 | Southcentral |
| Paxson | 87 | 288.4 | 0.79 | 187 | 27 | Southcentral |
| Slana | 87 | 249.3 | 0.68 | 162 | 23 | Southcentral |
| Sourdough | 87 | 117.2 | 0.32 | 76 | 11 | Southcentral |
| South Slana Homeste | 87 | 121.2 | 0.33 | 79 | 11 | Southcentral |
| South Wrangell Moun | 87 | 138.9 | 0.38 | 90 | 13 | Southcentral |
| Tazlina | 87 | 107.0 | 0.29 | 69 | 10 | Southcentral |
| Tonsina | 87 | 155.7 | 0.43 | 101 | 15 | Southcentral |
| West Glenn Highway | 87 | 92.0 | 0.25 | 60 | 9 | Southcentral |
| **PARKS HIGHWAY** | | | | | | |
| Anderson | 87 | 139.2 | 0.38 | 90 | 13 | Interior |
| Cantwell | 82 | 111.6 | 0.31 | 72 | 10 | Southcentral |
| Chase | 86 | 209.2 | 0.57 | 136 | 19 | Southcentral |
| Gold Creek | 86 | 174.0 | 0.48 | 113 | 16 | Southcentral |
| Healy | 87 | 132.1 | 0.36 | 86 | 12 | Interior |
| Hurricane-Broad Pass | 86 | 177.9 | 0.49 | 115 | 17 | Southcentral |
| McKinley Park Village | 87 | 242.0 | 0.66 | 157 | 23 | Interior |

FIG. 5. PERCENT OF KLAWOCK RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1984
(MEAN PER CAPITA HARVESTS: 223 LBS (1984), 235 LBS (1987))

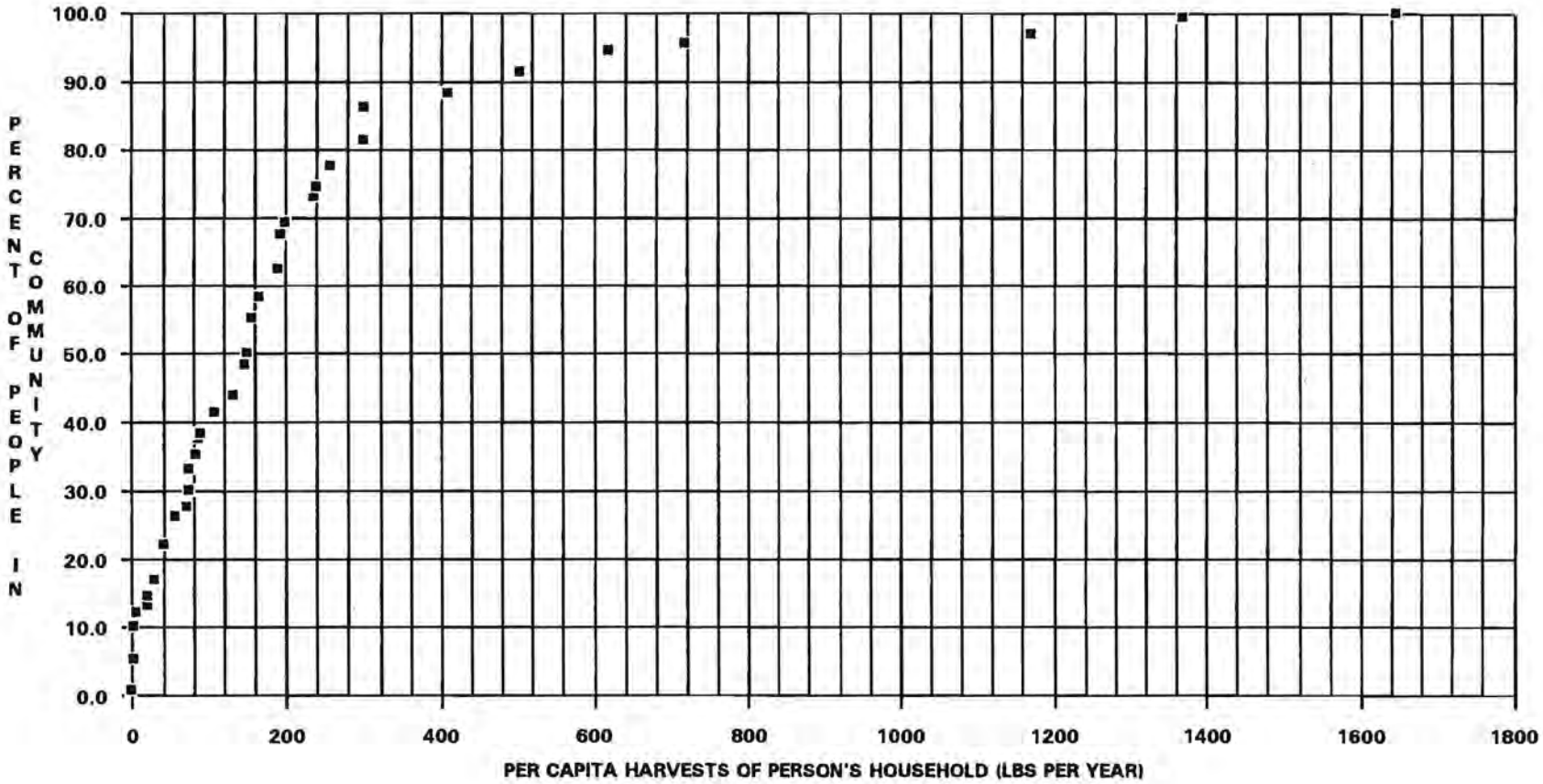


FIG. 6. PERCENT OF MENTASTA VILLAGE RESIDENTS BY HOUSEHOLDS'S PER CAPITA HARVESTS OF WILD FOODS, 1987
(MEAN PER CAPITA HARVESTS: 115 LBS (1982), 125 LBS (1987))

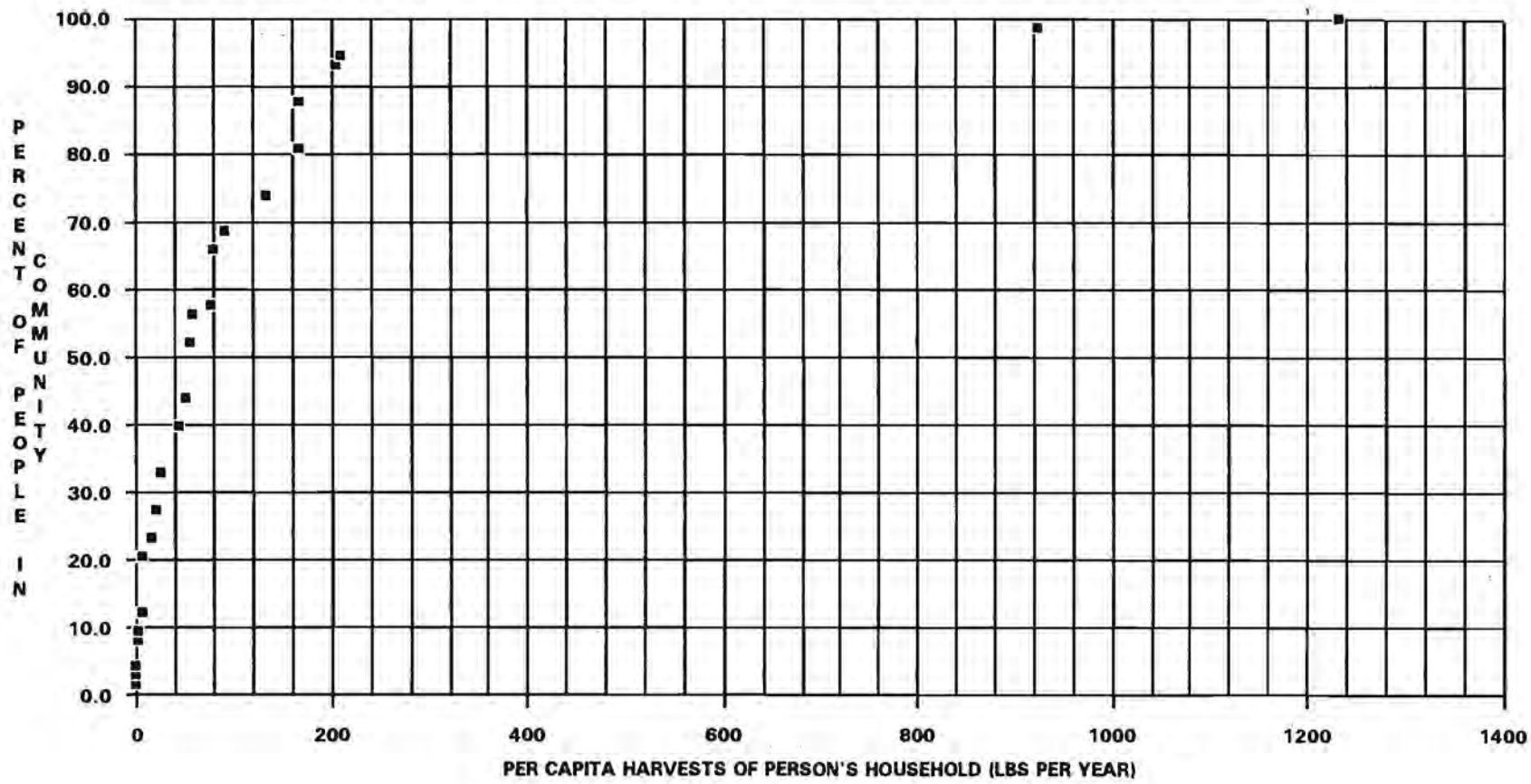


FIG. 7. PERCENT OF GULKANA RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1987
(MEAN PER CAPITA HARVESTS: 111 LBS (1982), 152 LBS (1987))

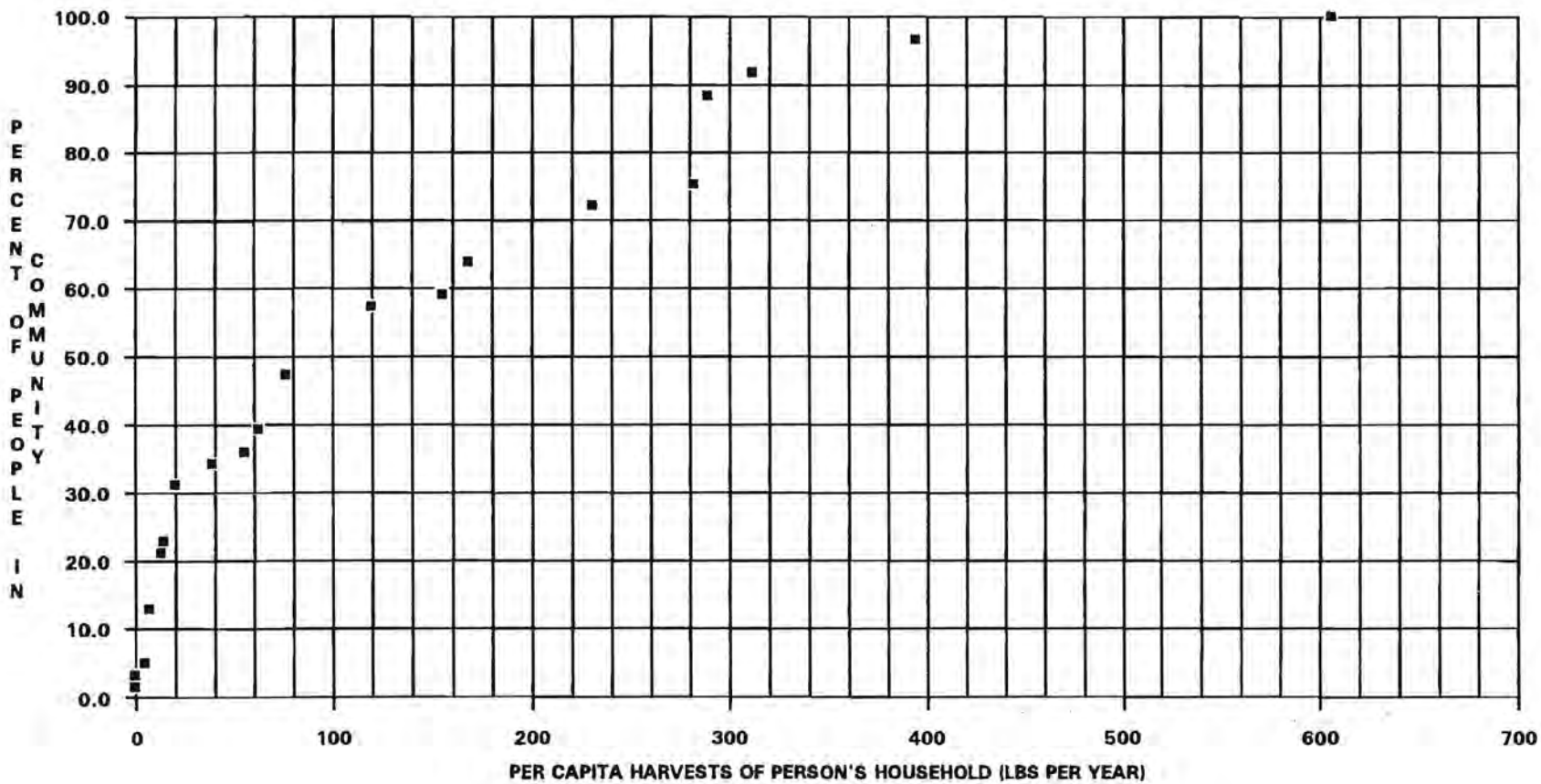


FIG. 8. PERCENT OF ENGLISH BAY RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1987
(MEAN PER CAPITA HARVESTS: 147 LBS (1981), 291 LBS (1987), 140 LBS (1989))

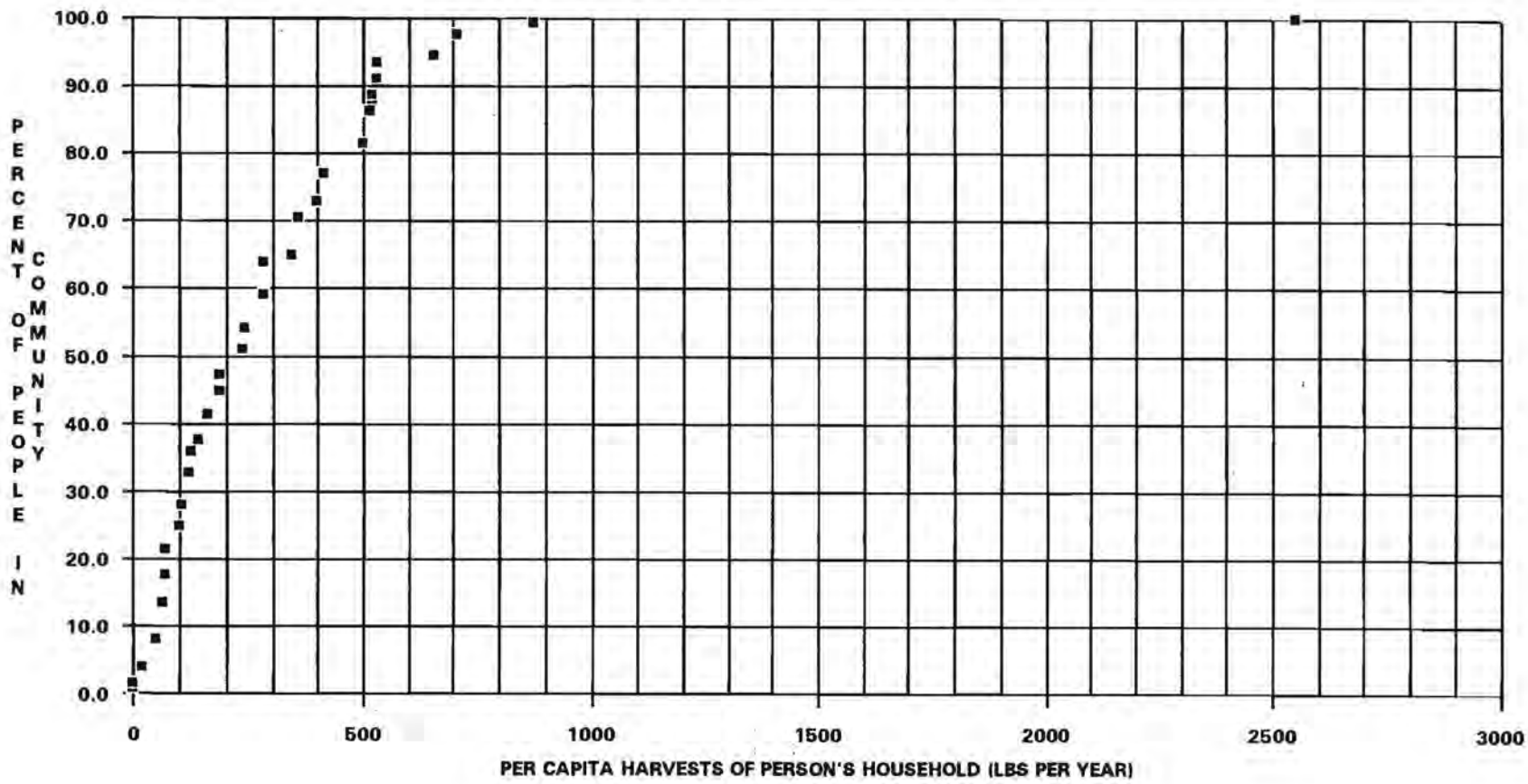


FIG. 9. PERCENT OF CHIGNIK BAY RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1984
(MEAN PER CAPITA HARVESTS: 187.9 LBS (1984))

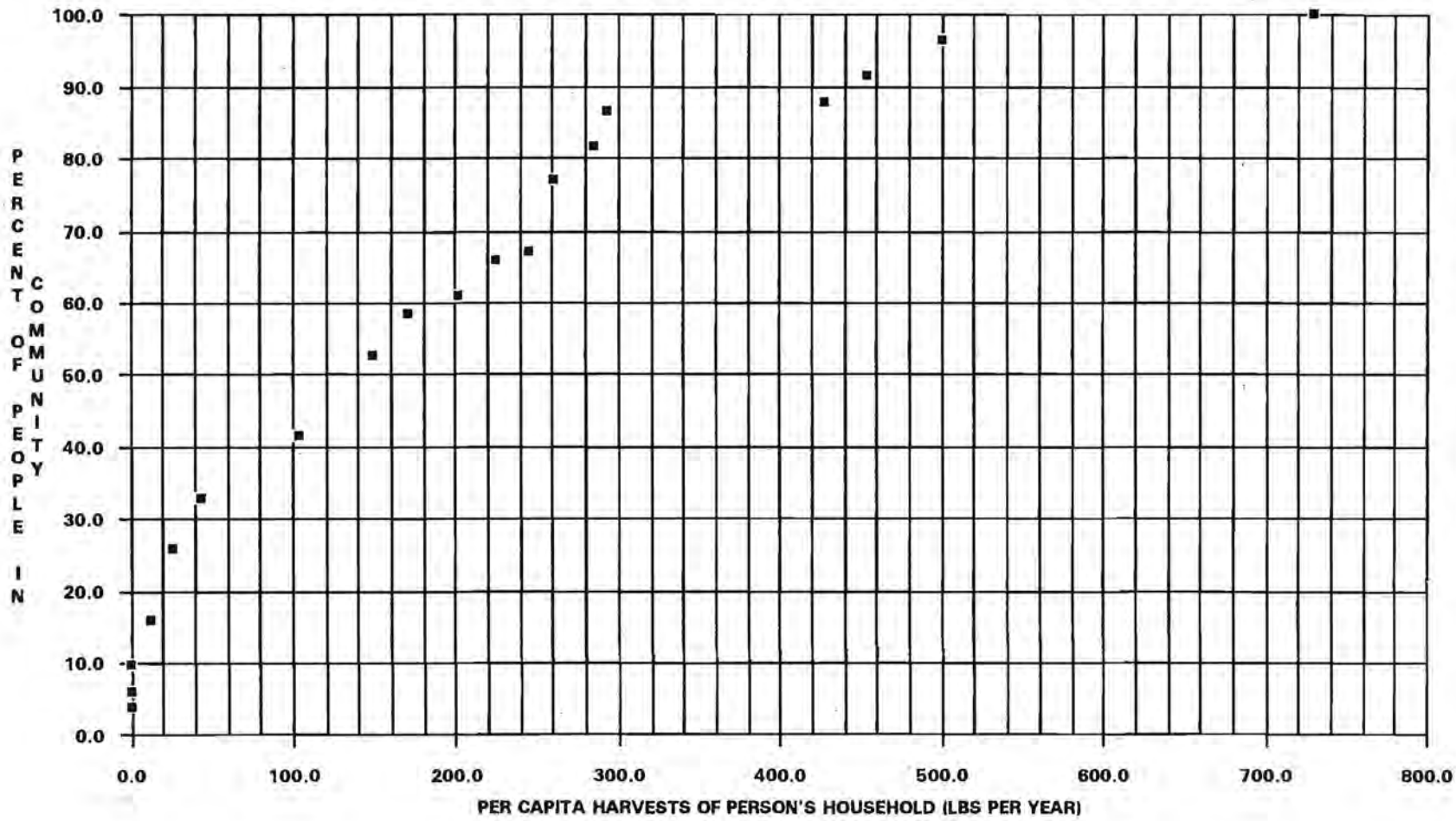


FIG. 10. PERCENT OF CHENEGA BAY RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1985
(MEAN PER CAPITA HARVESTS: 374.2 LBS (1985))

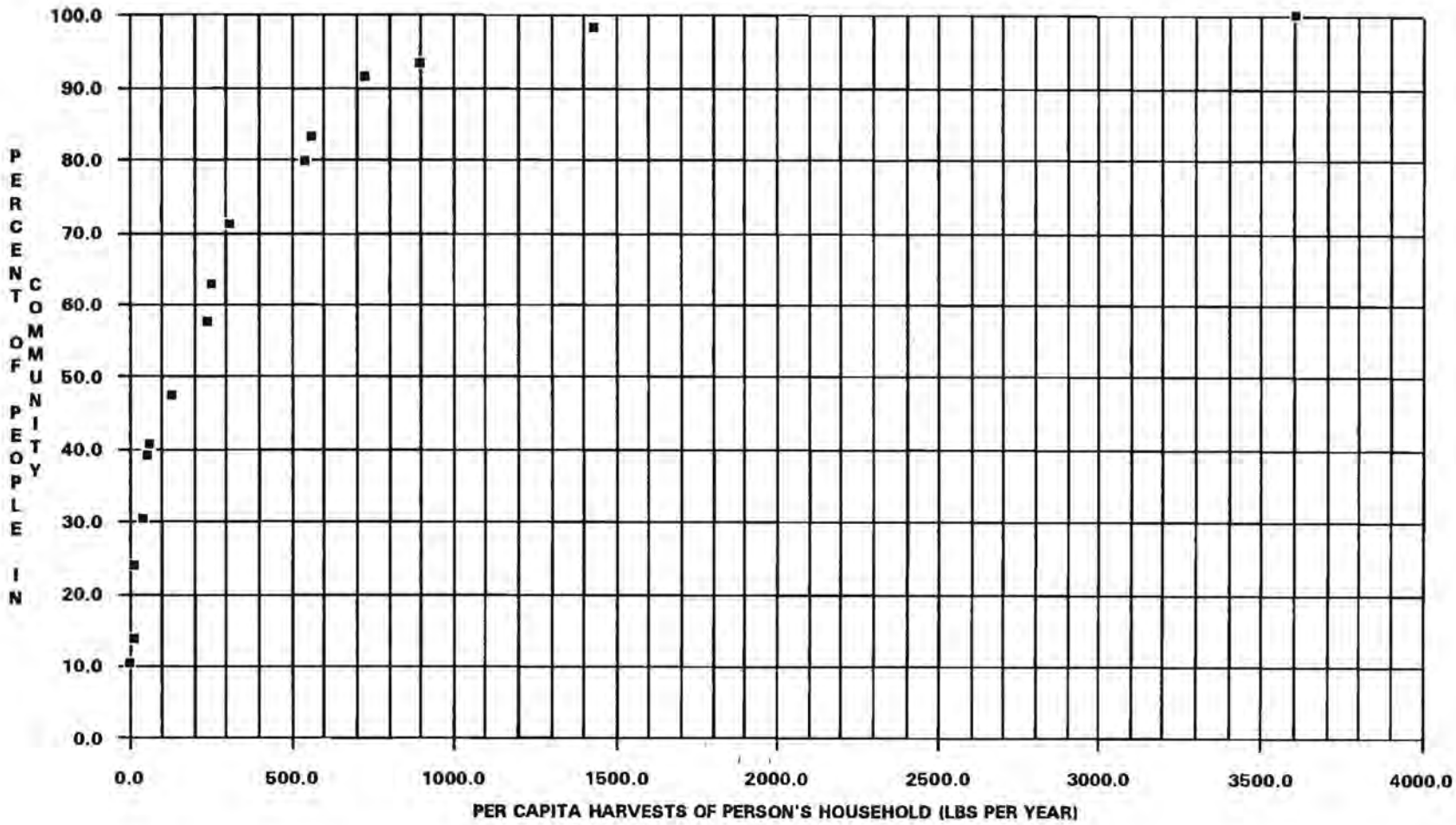


FIG. 11. PERCENT OF CHIGNIK LAGOON RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1984
(MEAN PER CAPITA HARVESTS: 220.2 LBS (1984))

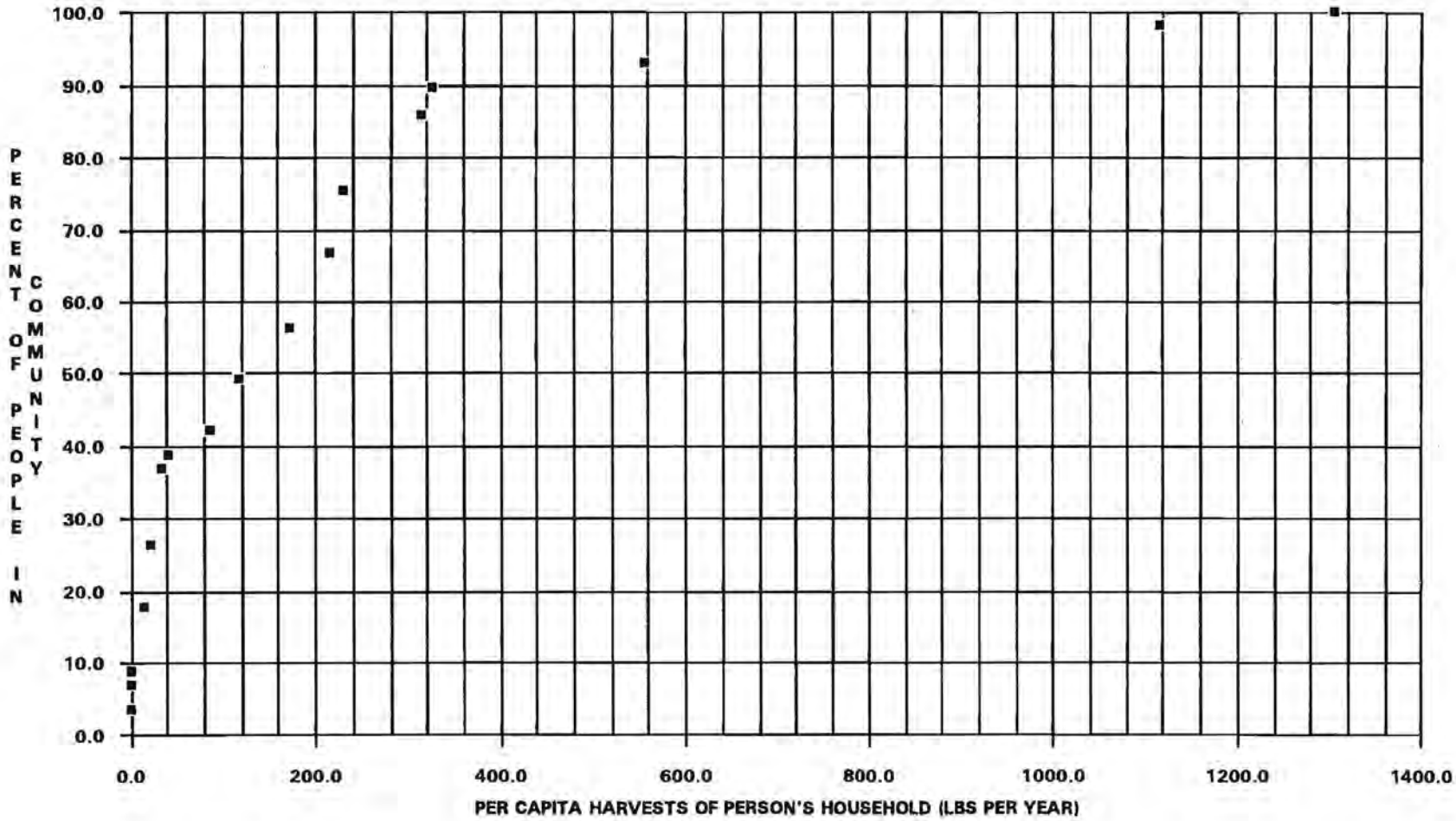


FIG. 12. PERCENT OF CHIGNIK LAKE RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1984
(MEAN PER CAPITA HARVESTS: 279.0 LBS (1984))

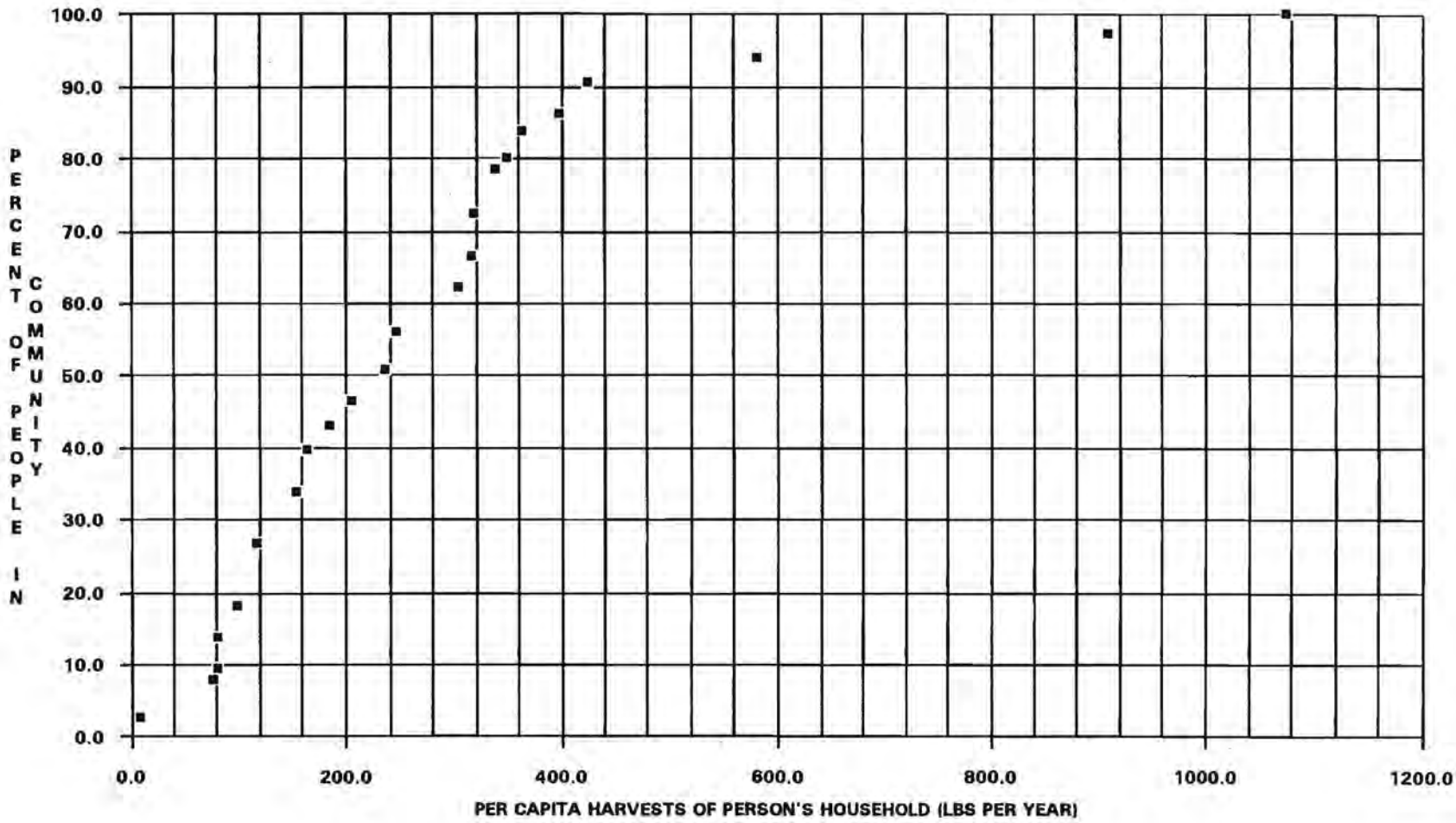


FIG. 13. PERCENT OF LARSEN BAY RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1982
(MEAN PER CAPITA HARVESTS: 403.5 LBS (1982))

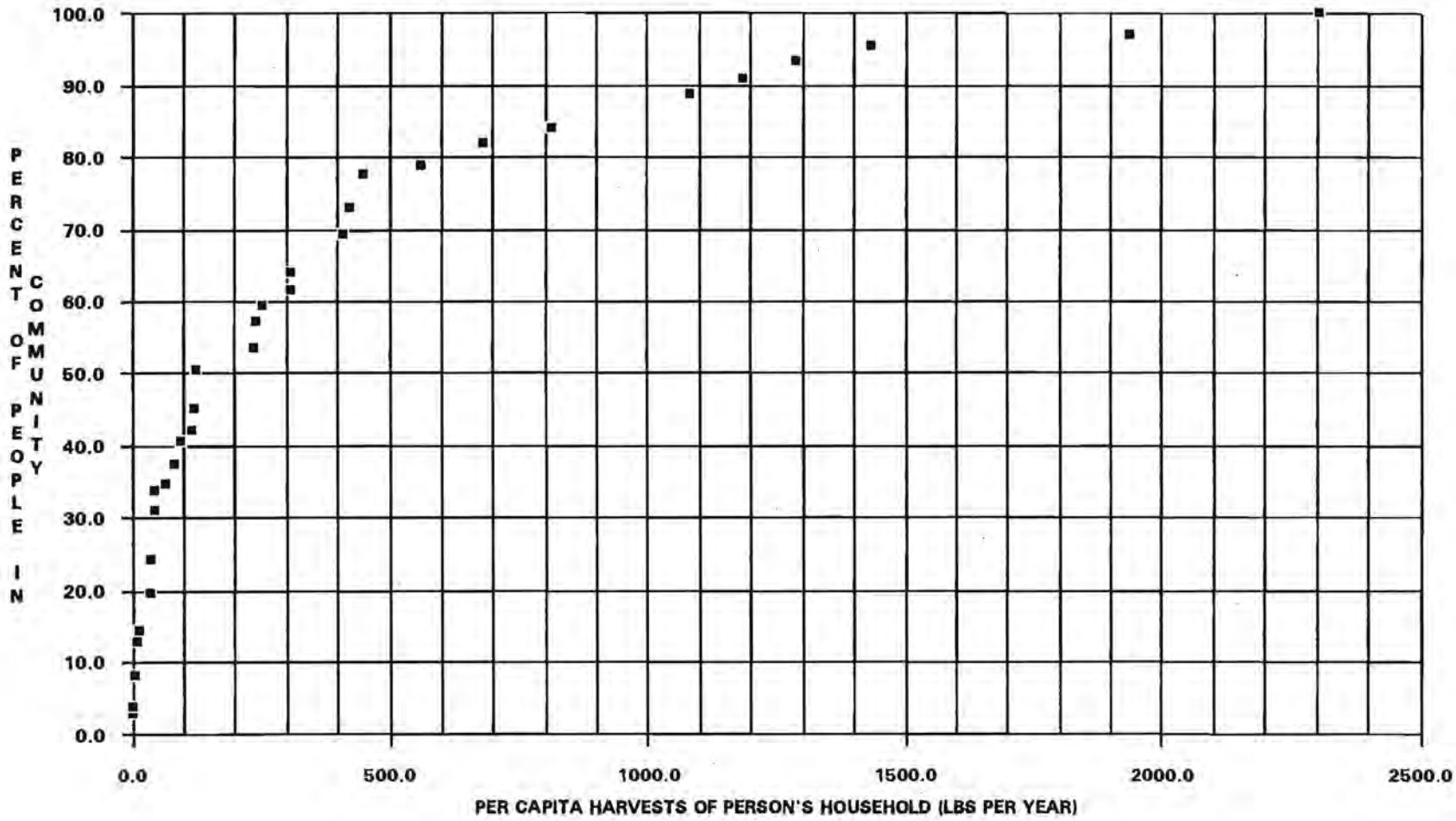


FIG. 14. PERCENT OF OUZINKIE RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1982
(MEAN PER CAPITA HARVESTS: 369.1 LBS (1982))

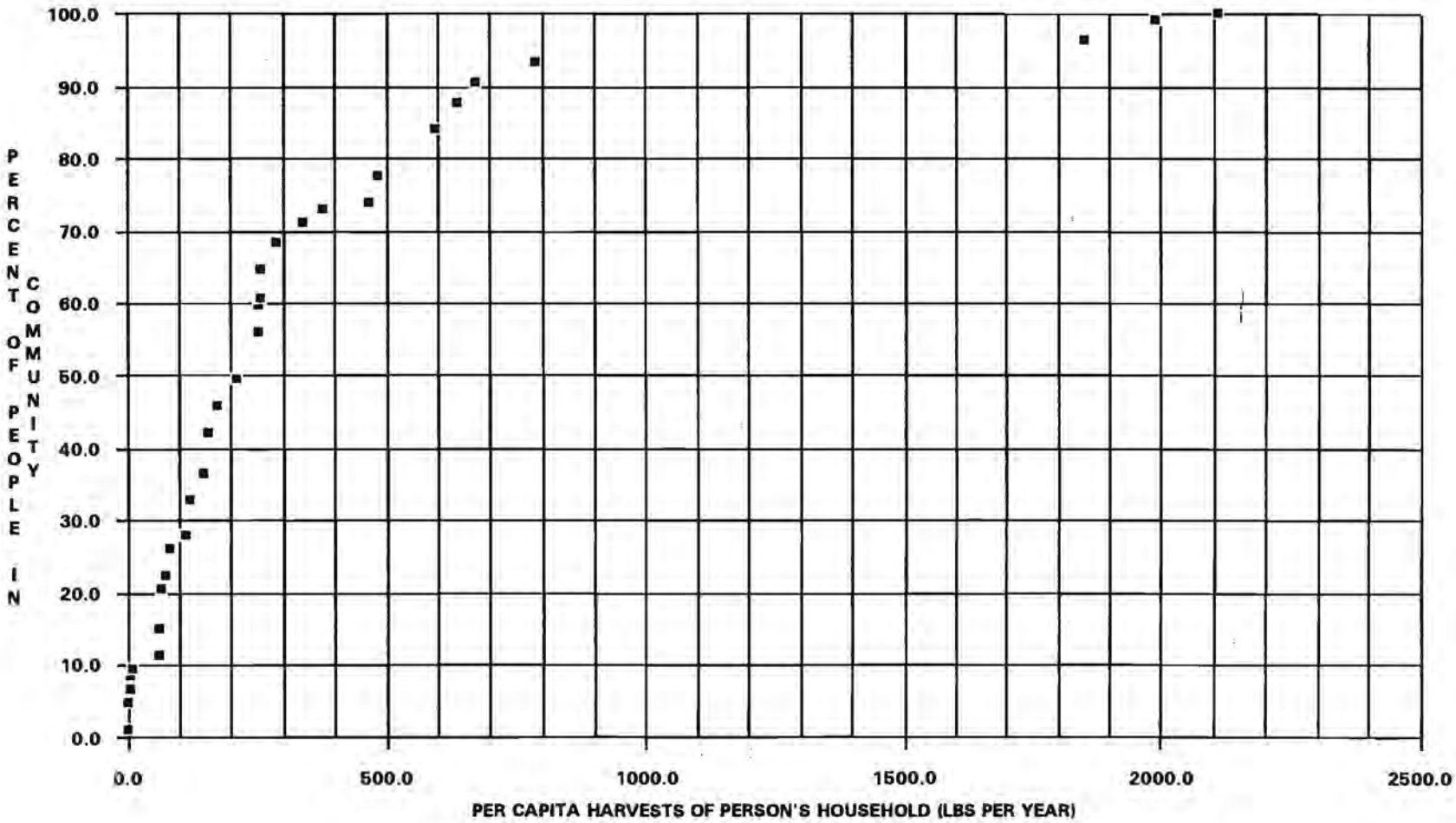


FIG. 15. PERCENT OF PORT LIONS RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1982
(MEAN PER CAPITA HARVESTS: 279.8 LBS (1982))

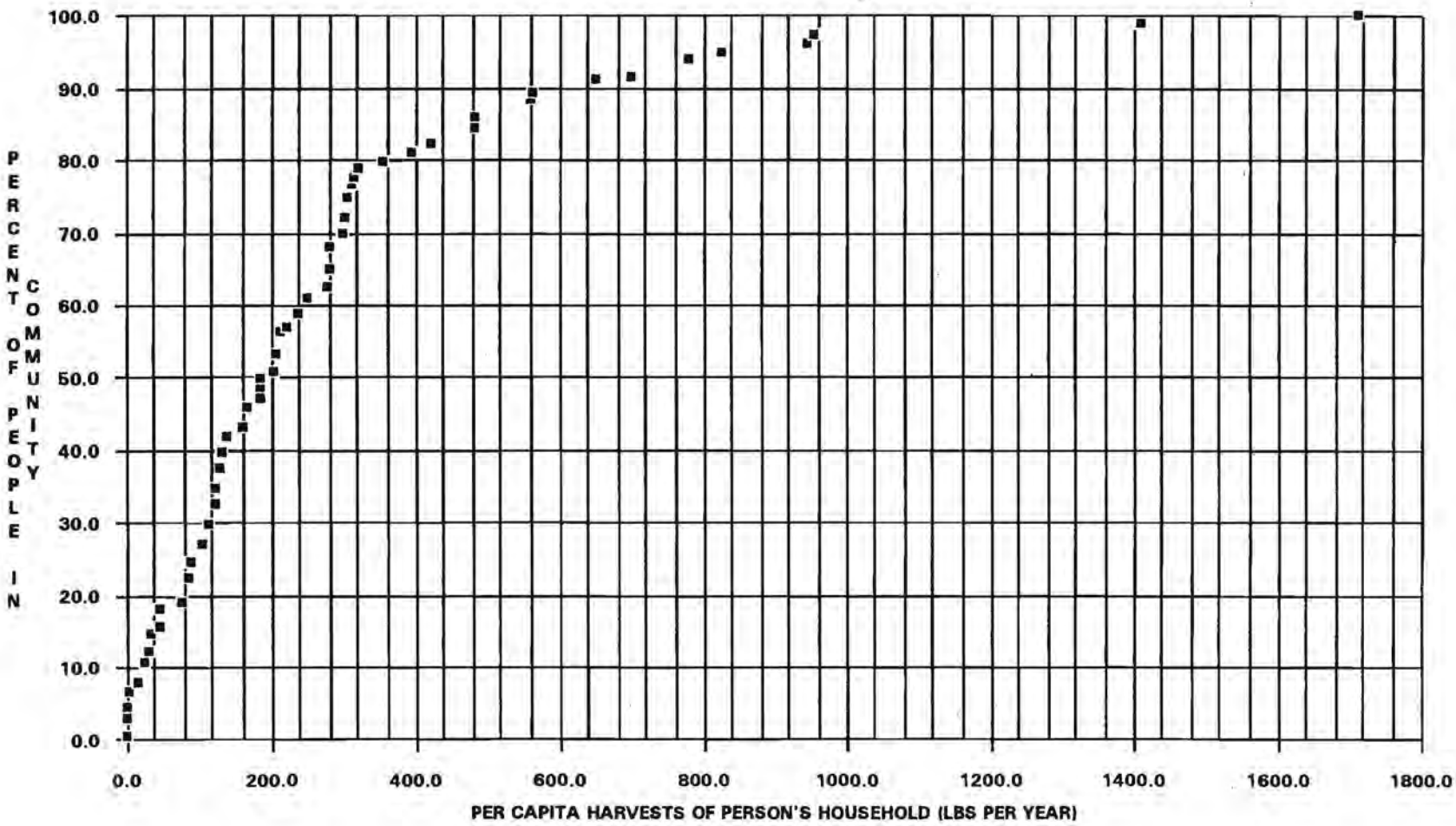


FIG. 16. PERCENT OF TATITLEK RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1987
(MEAN PER CAPITA HARVESTS: 351.7 LBS (1987))

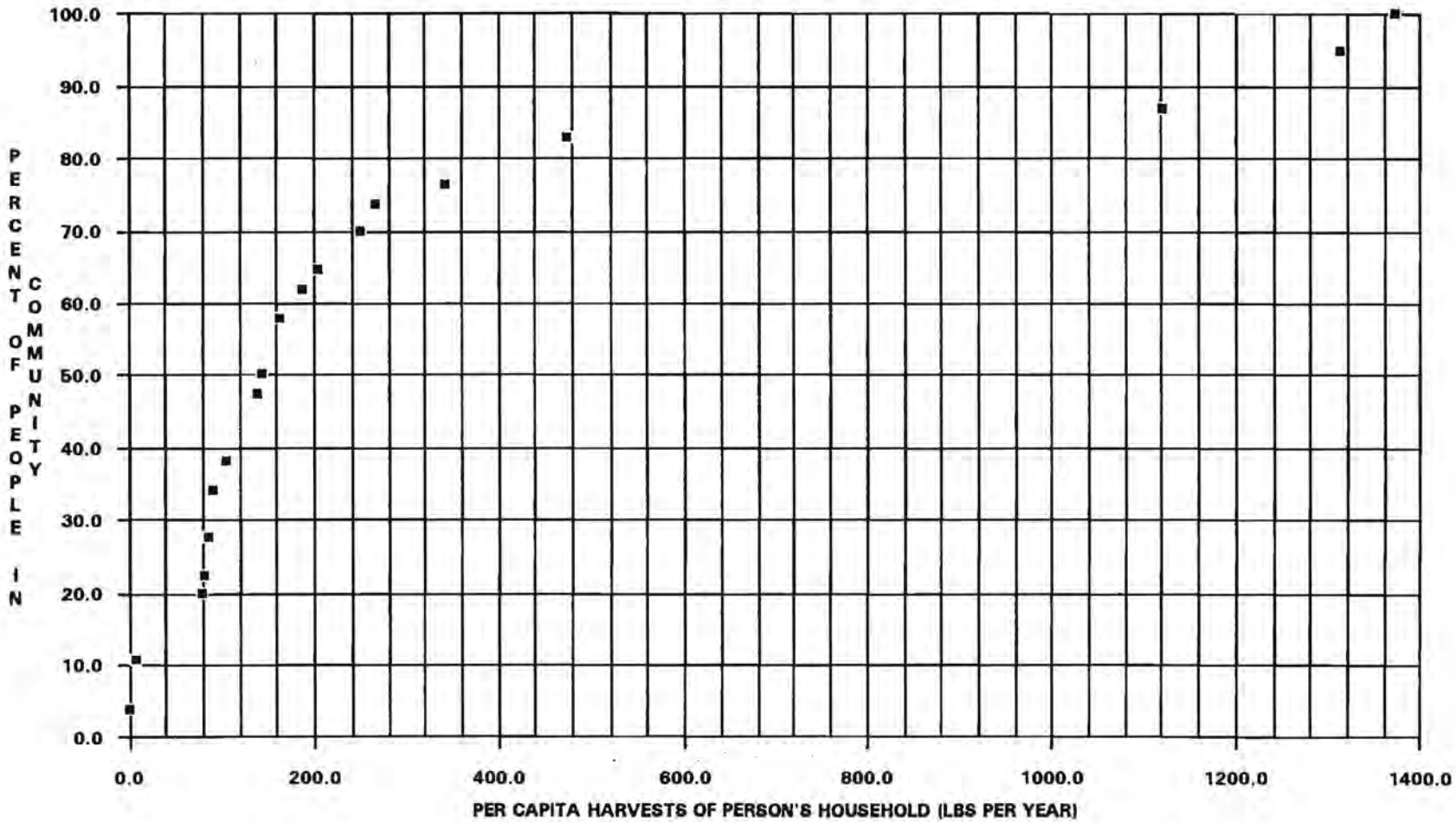


FIG. 17. PERCENT OF AKHIOK RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1982
(MEAN PER CAPITA HARVESTS: 519.5 LBS (1982), 159.3 (1986), 297.7 (1989))

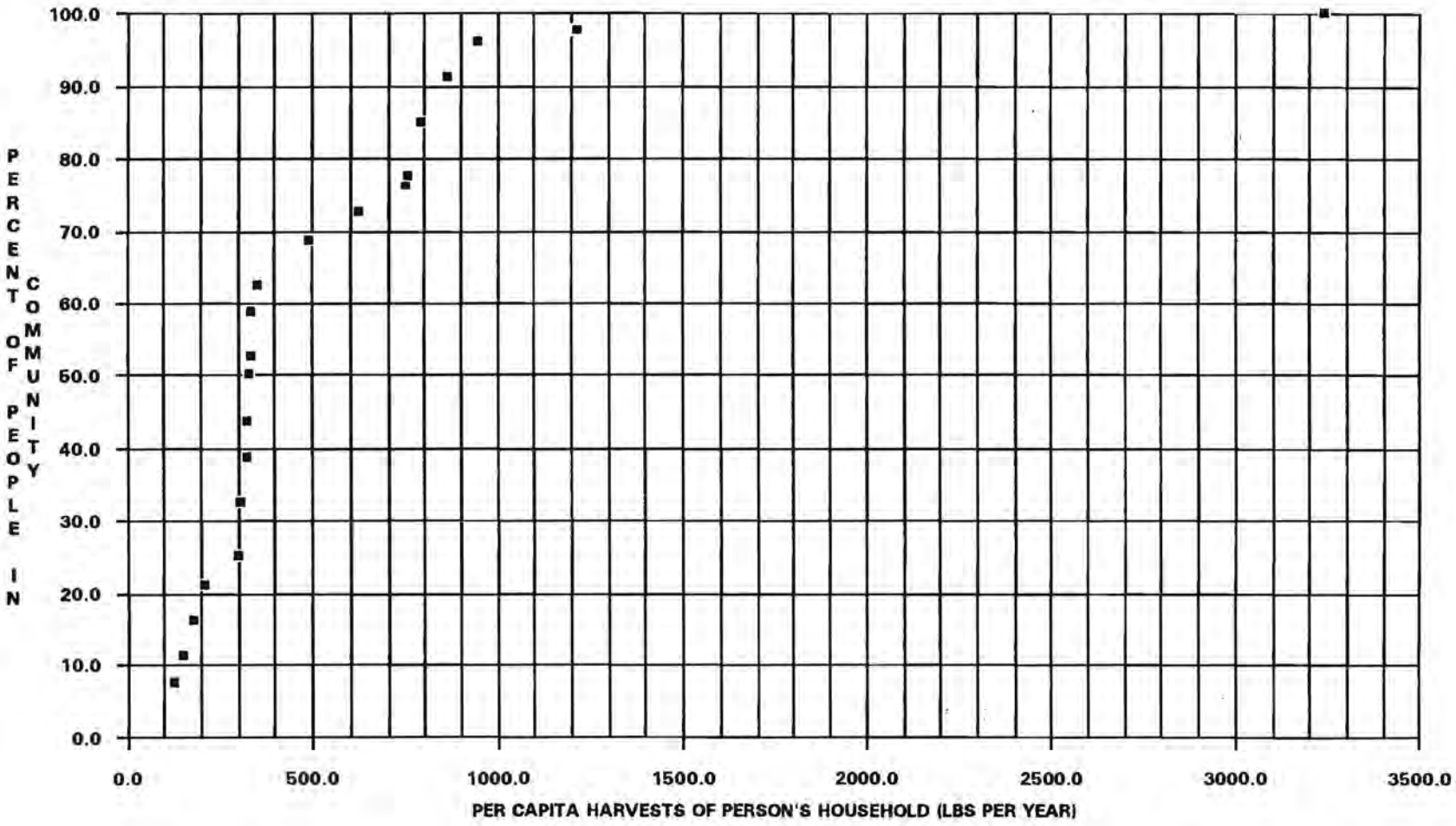
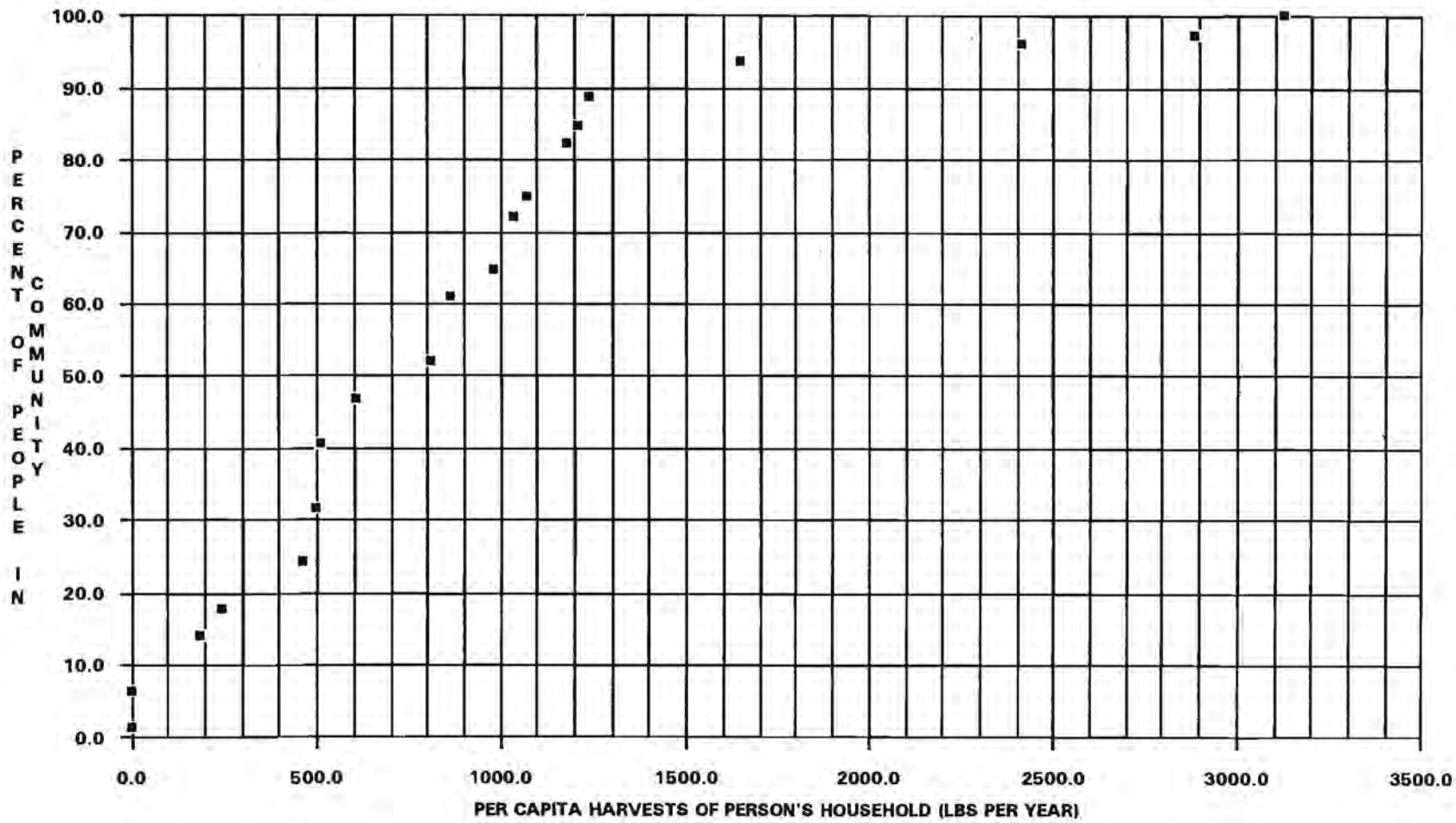


FIG. 18. PERCENT OF KARLUK RESIDENTS BY HOUSEHOLD'S PER CAPITA HARVESTS OF WILD FOODS, 1982
(MEAN PER CAPITA HARVESTS: 863.2 LBS (1982), 381.0 LBS (1986), 250.5 LBS (1989)



## Table 3. Recommended Daily Dietary Allowances

| | Age | Protein | Age | Kilocalories |
|---|---|---|---|---|
| Infants | 0.0 to 0.5 | kg x 2.2 | 1 to 3 mo | kg x 120 |
| | 0.5 to 1.0 | kg x 2.0 | 4 to 9 mo | kg x 110 |
| | | | 10 to 12 mo | kg x 100 |
| Children | 1 to 3 | 23 | | 1200 |
| | 4 to 6 | 30 | | 1600 |
| | 7 to 10 | 34 | 7 to 9 | 2000 |
| Males | 11 to 14 | 45 | 10 to 12 | 2500 |
| | | | 13 to 15 | 3200 |
| | 15 to 18 | 56 | 16 to 20 | 3800 |
| | 19 to 22 | 56 | 25 | 3200 |
| | 23 to 50 | 56 | 45 | 2900 |
| | 51+ | 56 | 65 | 2600 |
| Females | 11 to 14 | 46 | 10 to 12 | 2300 |
| | | | 13 to 15 | 2500 |
| | 15 to 18 | 46 | 16 to 20 | 2400 |
| | 19 to 22 | 44 | 25 | 2300 |
| | 23 to 50 | 44 | 45 | 2100 |
| | 51+ | 44 | 65 | 1800 |
| | pregnant | plus 30 | | plus 400 |
| | lactating | plus 20 | | plus 1000 |

Sources: For protein, Food and Nutrition Board, National Academy of Sciences, National Research Council, Rev. 1980, reprinted p. 876-7 in Merck Manual of Diagnosis and Therapy, 14th Edition, 1982, Robert Brekow (ed) NJ: Merck, Sharp, and Duhme Research Laboratories.
For kilocalories, Food and Nutrition Board, National Research Council, p. 106-107 in Magnus Pyke (1974) Man and Food.

## Table 4. Food Values Per 100 g Edible Portion for Selected Wild Foods

| Item | Protein | Fat | Kilocalories | Source |
|---|---|---|---|---|
| Caribou | 26 | 1.4 | | 1 |
| Moose | 25 | 1.1 | | 1 |
| Whale | 27 | 0.8 | | 1 |
| Ptarmigan | 27 | 1.8 | | 1 |
| Snow Goose | 24 | 6.1 | | 1 |
| Whitefish | 24 | 3.9 | | 1 |
| Trout | 23 | 2.1 | | 1 |
| Wild Duck | 21.1 | 15.8 | 233 | 2 |
| Hare | 21 | 5 | 135 | 2 |
| Reindeer side | 20.5 | 14.4 | 217 | 2 |
| Reindeer forequarter | 21.8 | 9.4 | 178 | 2 |
| Reindeer hindquarter | 19.4 | 19.2 | 256 | 2 |
| Deer | 21 | 4 | 126 | 2 |
| Whale | 20.6 | 7.5 | 156 | 2 |
| Halibut | 20.9 | 1.2 | 100 | 2 |
| Herring | 17.3 | 11.3 | 176 | 2 |
| Salmon | 22.5 | 13.4 | 217 | 2 |
| Trout | 21.5 | 11.4 | 195 | 2 |

Sources:

No 1. Peter J. Usher (1976) Evaluating country food in the northern native economy. Arctic 29(2):105-120

No 2. Magnus Pyke (1974) Man and Food. New York, World University Library, p. 20-21, 36-37

## STATISTICS ON SUBSISTENCE IN ALASKA

1. **Total Subsistence Harvest.** During the 1980s, rural communities harvested about 35-45 million pounds annually for family consumption (pounds usable weight).

2. **Population.** During the 1980s, there were about 110,000 rural residents in about 225 communities (about 50,000 Alaska Natives and about 60,000 non-Native) (20 percent of Alaska's population).

3. **Subsistence Harvest Per Person.** The annual subsistence harvest comes to about 350 lbs per person a year, or about a pound of food per day, in rural areas.

4. **Comparisons with the "American" Diet.** Rural Alaskans harvest more wild meat, fish, and fowl, on the average, than most Americans buy from grocery stores. The average American uses about 222 lbs of store-bought meat, fish, and poultry each year (Americans use about 1,370 lbs of all foods each year). In general terms, the high volume of subsistence foods in rural Alaska communities commonly substitute for dairy products (from milk), which is the single largest food item in the average American diet (about 350 lbs per American per year); dairy products are much less available in most rural Alaska communities and less common in rural Alaska's diet.

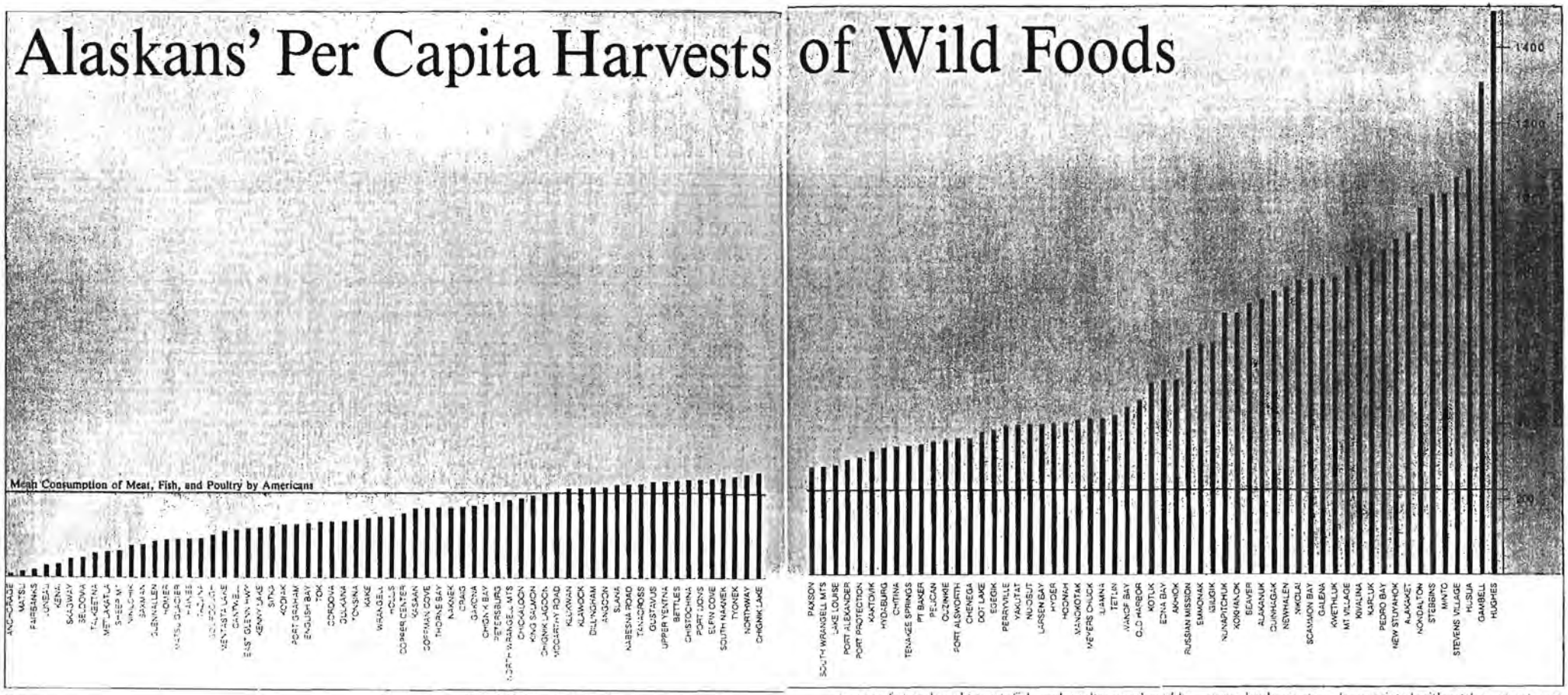
5. **Nutritional Needs.** In terms of nutritional needs, the annual subsistence harvest contains 100% of the protein requirements for most (81%) rural communities (about 44 g protein per person per day, or about .422 lbs of wild foods per person per day). However, the annual subsistence harvest contains less than 50% of the caloric requirements of most (74%) rural communities (about 2400 Kilocalories per person per day, or 2.94 lbs of wild foods per person per day). That is, wild foods are excellent sources of protein but poorer sources of energy (calories). Most rural communities import carbohydrates (sugars and starches), which are good sources of calories, to meet their caloric requirements.

6. **Composition of the Harvest.** Of the annual subsistence harvest, about 59% by weight was fish, 18% was land mammals, 15% was marine mammals, and 8% was "other" (marine invertebrates, birds, and plants)

7. **Location of the Harvest.** The subsistence harvest occurs in all regions of the state. However, harvest levels vary substantially between communities and regions. The accompanying graphics illustrate some of these differences.

Source: Robert J. Wolfe, Division of Subsistence, Alaska Department of Fish and Game, Box 3-2000, Juneau, AK 99802 (907) 465-4147

# Alaskans' Per Capita Harvests of Wild Foods




## *Rural Alaskans Harvest More Wild Meat, Fish, and Fowl, on the Average, Than Most Americans Buy in the Grocery Store*

Alaskans use a lot of wild food. According to recent harvest surveys, many Alaskans harvest more wild meat and fish than the average American buys from the grocery store.

Since the Alaska subsistence law was adopted eleven years ago, the Division of Subsistence has compiled harvest data for more than 100 Alaska communities. They show that annual harvests vary from a low of 10 pounds per person (in Anchorage) to a high of 1,498 pounds per person (in Hughes). The median harvest is about 250 pounds.

The graph above shows harvests of fish, land mammals, marine mammals, and other wild resources in 122 Alaska communities. Harvest totals represent pounds dressed weight per person per year.

In approximately half of the sampled Alaska communities, wild food harvests are greater than the average 222 pounds per person of store-bought meat, fish, and poultry purchased by families in the western United States each year.

Harvests varied significantly by region. Harvests in northwest and Arctic Alaska are highest (610 pounds per capita), followed by the Aleutian and Pacific coasts (378 pounds), the subarctic interior (377 pounds), and southeast Alaska (212 pounds). Harvests in predominantly urban areas of Alaska (Anchorage, Fairbanks, Juneau, Matanuska-Susitna Borough, Kenai, Ninilchik, Homer, and Seldovia) are lowest (48 pounds).

Why are harvests so different in different communities? Non-Native settlement entry, personal income, and location are among the factors accounting for some of the variation. In general, Native communities harvest more wild foods than non-Native communities. Communities with greater mean taxable incomes tend to harvest less subsistence food. Community income levels are strongly associated with settlement entry, so that statistically a community's non-Native population and mean income increase together.

In general, harvests increase as the distance from the road systems increases. In other words, the communities with the lowest subsistence harvests in the 1980s occur along the roaded, settled areas surrounding Anchorage and Fairbanks.

Why do some rural Alaskans use so much more meat, fish, and fowl than the most Americans? Alaskans substitute wild foods for milk products (the single largest item in the American diet), fruits, vegetables, and grains. In rural Alaska, such imported foods are expensive and not always available. Some of the subsistence harvest (dried fish in particular) also is used to feed dogs. Rural Alaskans' diet is quite different from the diet of most Americans, as it is loaded with nutritious foods.