

Agriculture & Alaska's economy

Materials

- Copies of Alaska ag stats (see URLs below for PDF downloads)
- USDA Ag Fact Book (see URLs for PDF downloads)
- recommended, latest Alaska Agricultural Statistics book; "Farm Facts," from American Farm Bureau Federation
- Internet access
- US & Alaska maps

Objectives

Familiarize student with Alaska agricultural production and relate that to total US ag production, including that of other states; familiarize students with use of statistical data.

Suggested grade levels

5-8

Alaska Content Standards

Mathematics A1-4, 5; B1-8; C1-2; D1-4; E1-3;
Geography A1-2; B1, 7; C1; D1-4; E1; Government F2, 9; G1; History A1, 2; C1-4; D2; Technology A1-3; B1-3; C1-2.



This project presented by Alaska Agriculture in the Classroom through funding from the Alaska Division of

Agriculture and the Alaska Farm Bureau. For information, visit www.agclassroom.org/ak



Introduction

While Alaska farmers and ranchers provide a small percentage of the total amount of food consumed in Alaska, their contributions to Alaska's self-sufficiency and Alaska's economy are significant. Agriculture is the sixth-leading industry in the state, with nearly \$52 million in gross receipts in 2001. While that lags far behind oil and gas and tourism, it is still important for Alaska's future.

To promote Alaska's agricultural products, the state instituted the Alaska Grown program. That allows a special seal to be placed on the packaging of products grown or raised in Alaska.

Because it is generally more expensive to raise crops and livestock in Alaska than in other areas, Alaska Grown products are seldom less expensive than good brought in from other states and countries.

Directions

Because statistics change frequently, the following exercises should be considered as guidelines for suggested student activities. Other lesson plans are available at the National Agricultural Statistics Service website. Actual exercises will depend on available statistics either online or in printed form, or both. Use of up-to-date data via the Internet is encouraged.

1. Alaska's ag numbers

Looking at Alaska farm production figures (from AASS download or booklet), chart the changes in various agricultural production. For example, the number of farms and land in farms has remained fairly stable since the early 1990s. Some products have seen great changes. Mutton production has risen, but the numbers of beef and pork animals have fallen. The production of carrots has about doubled since 1993. *Have students compare figures, calculate differences and hypothesize why there might be dramatic changes in production. Possible considerations are weather, diseases, loss of processing facilities, higher transportation costs, etc.*

2. Compare Alaska and other states using USDA number on line, the 1997 Census of Agriculture booklet, information from other sources. *The following examples were derived from an American Farm Bureau poster "America the Bountiful," but similar questions could be asked of other statistical information available on line or in recent publications.*

a. Agricultural production in Alaska (the largest state) versus Rhode Island (the smallest state)? *Total cash receipts for 1999 show RI at \$64 million to Alaska's \$47 million. That means Alaska had about 73 percent of the output of Rhode Island.*

b. What state had the highest agricultural cash receipts in 1999? How much production was there from that state from the second-greatest? *California had cash ag receipts of \$24,116 million in 1999, \$10,882 million more than Texas, the second highest. That means California had 45 percent*

Terms to Define

statistics
 average
 mean
 gross
 net
 receipts
 production
 survey



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developed by Victoria Naegele, AAITC

more cash receipts than Texas.

c. What are the fewest states you could combine to reach California's output in 1999 (within \$50)? What are the most? *Texas at \$13,234 million, Illinois at 6,682 million and Missouri at \$4,247 million together (total \$24,163 million) exceed California's total by \$47 million. Other combinations may also work. Using the smallest output states together. It takes the bottom 23 states (AK, RI, NH, NV, WV, CT, MA, ME, HI, VT, DE, NJ, UT, WY, SC, MD, MT, LA, NM, TN, VA, AZ, ND) together to exceed California's agricultural cash receipts in 1999.*

3. Look at agriculture across the nation (examples)

a. Where are the most farms in the US? Where is the average farm size the largest? smallest? (information available on line at <http://www.usda.gov/nass/aggraphs/landinfarms.htm>)

b. What state grows the most peppermint? mushrooms?

Discussion points

1. How does buying locally (Alaska Grown) help Alaska's economy?
2. What environmental factors limit production in Alaska?
3. What economic factors limit production in Alaska?
4. What challenges do Alaska farmers face that are less likely to be an issue in other parts of the country?
5. How do farm products vary in different regions of Alaska?
6. How much more potential is there for agriculture in Alaska?
7. In what ways could Alaska's agricultural industry be stimulated?
8. Alaska has gained about 40 farms in the last 10 years but the total acres farmed is down about 20,000. Why might that be? What could it mean for the future of Alaska agriculture?
9. How does technology affect Alaska agriculture?
10. What are your advantages of buying Alaska Grown products?

- Obtain Farm Facts from American Farm Bureau Federation Public Relations, 225 Touthy Ave., Park Ridge, IL, 60068; www.fb.org. Charge: \$4 for single copy or \$2 a piece for five or more copies.

- Obtain Alaska Agricultural Statistics from Alaska Agricultural Statistics Service, PO Box 799, Palmer, AK 99645; 907-745-4272; 1-800-478-6079. Single copy is free.

Websites

<http://www.usda.gov/news/pubs/fbook00/contents.htm>
<http://www.nass.usda.gov/census/census97/profiles/ak/ak.htm>
<http://www.nass.usda.gov/ak/alaska02/akcont02.htm>
<http://www.fb.org/brochures/farmfacts/index.html>
<http://www.usda.gov/nass/nasskids/nasskids.html>

Related activity: Alaska Farming Game (on CD)