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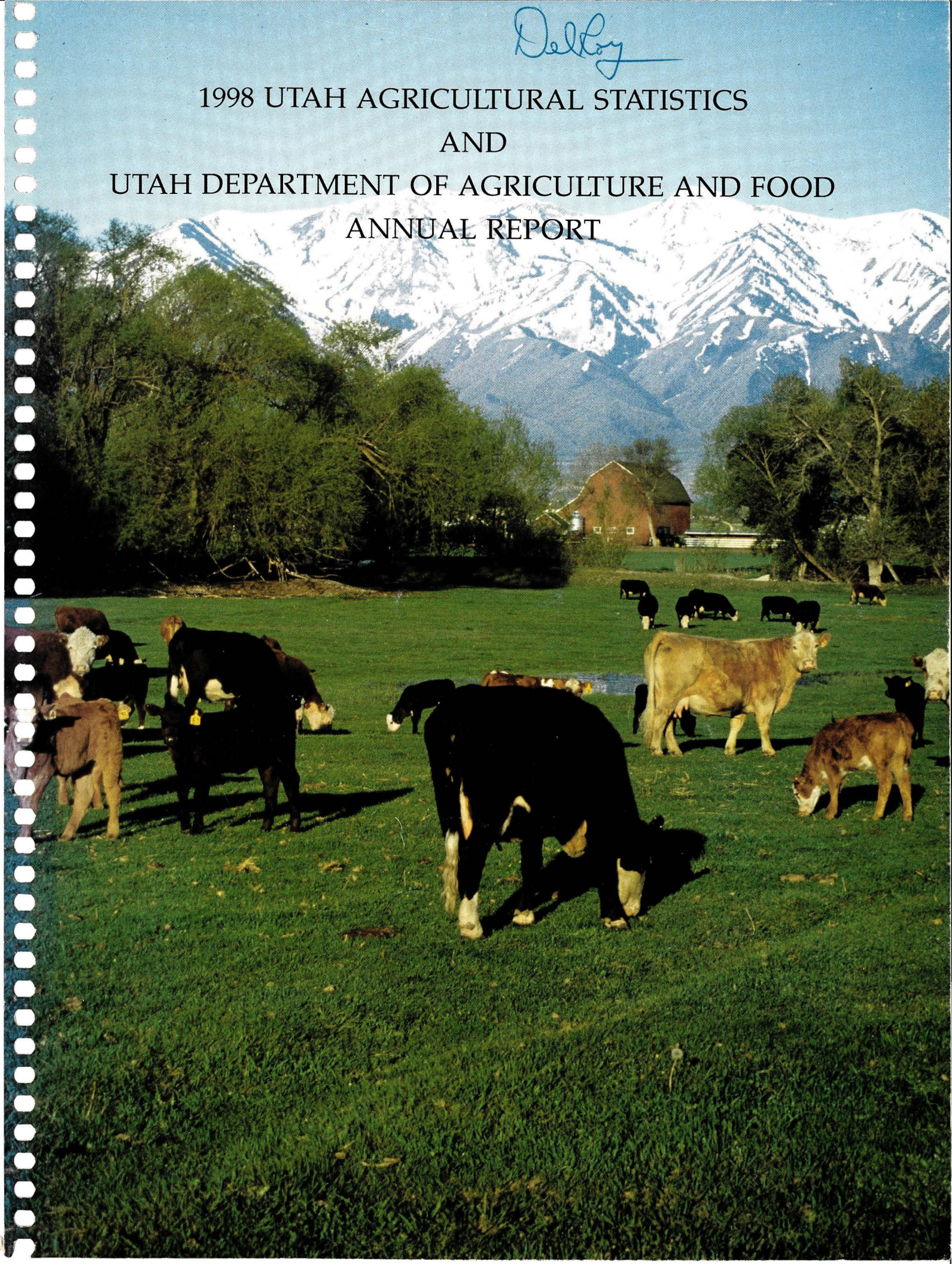
1998 UTAH AGRICULTURAL STATISTICS
AND
UTAH DEPARTMENT OF AGRICULTURE AND FOOD
ANNUAL REPORT



Michael O. Leavitt,
Governor,
State of Utah

Dear friends of agriculture,

This has been another outstanding year for Utah Agriculture. Our farmers and ranchers produced more high quality goods than in any time in the past eight years. That increased production helped Utah businesses generate nearly $300 million in exports of raw and value-added food items around the world.

Utah farmers and ranchers are contributing to our healthy economy, and they are contributing to an impressive national economy that exports $56 billion a year in agricultural products--the country's single largest export sector. Our farmland is truly an economic resource.

I am happy to report that a number of steps have been taken this year to protect Utah's valuable farm and ranch lands. For the first time since my 1995 Growth Summit, public funds have been set aside by the Utah Legislature to protect open space and critical resource lands. I am also pleased with the broad support for the Legacy Highway in Salt Lake and Davis Counties. The highway alignment was configured away from at least two productive farms, and is sensitive to the open space needs of our communities. The highway is an example of how we can meet the challenges of growth while protecting our resources. While these are encouraging examples, there is still more that can be done.

This is the Year of the Farmer in Utah, and I ask you to reflect on the contributions our farmers and ranchers make to our lives. I'm reminded of those contributions every time I see that bumper sticker that reads, "Love to eat? Embrace agriculture!"

Sincerely,

Michael O. Leavitt

Michael O. Leavitt, Governor
State of Utah

Introduction

This publication is provided to help inform farmers, ranchers, and the public about activities within the Utah Department of Agriculture and Food, and provide a detailed look at Utah's agricultural production. Also included are budgets for helping farmers and ranchers evaluate the potential profitability of various agricultural commodities produced in the State.

The Utah Agricultural Statistics Service of USDA's National Agricultural Statistics Service (NASS) and the Utah Department of Agriculture and Food have jointly prepared this publication for the past 28 years. Estimates presented in the publication are current for 1997 production, and January 1, 1998 inventories. Data users that need 1998 information or historic data should contact the Utah Agricultural Statistics Service, phone 524-5003 or 1-800-747-8522 if outside the Salt Lake calling area. Statistics for other States and the United States are also available at the office.

The agricultural statistics in this publication are the result of farmers, ranchers, and agribusinesses responding to various survey questionnaires during the year. Information they provided about their operations is confidential and used only in combination with other reports. A special thanks for their voluntary contribution to help make the estimates possible. Our NASDA enumerators continue to be very impressed with the patients and dedication of Utah's farmers and ranchers in providing survey information. They would like to thank them for answering all those questions.

Estimates are subject to revision and previous years may have been revised in this publication. Data users should use this publication for previous years data.

Information and statistics are an important part of decision making for farmers and ranchers. The internet has provided a tool to disperse a variety of information in a easily accessible timely manner. I found the following Web page sources of interest to agriculture and thought you might be interested in them.

Organization	Web Page Address
U. S. Department of Agriculture (Includes all USDA Agencies)	http://www.usda.gov/
National Agricultural Statistics Service (Plus Census of Agriculture)	http://www.usda.gov/nass/
Utah Agricultural Statistics Service	http://www.nass.usda.gov/ut/
USDA Market News	http://www.usda.gov/ams/sermrknw.htm
USDA-Natural Resources Conservation Service (Includes Utah Snow Surveys)	http://utdmp.utsnow.nrcs.usda.gov
Fedstats (Statistics from Federal Agencies)	http://www.fedstats.gov/
The Federal Register	http://www.nara.gov/fedreg/index.html
Agriculture Sources	http://www.agsource.com/
Utah Department of Agriculture and Food	http://www.ag.state.ut.us/
National Association of State Departments of Agriculture (NASDA)	http://www.nasda-hq.org
Salt Lake City National Weather Service	http://nimbo.wrh.noaa.gov/saltlake/
Western Regional Climate Center	http://wrcc.sage.dri.edu/
Utah Climate Center	http://climate.usu.edu/
USU Extension Service	http://est.usu.edu/
Utah Agriculture in the classroom	http://ext.usu.edu/aitc/
National Farmers Union	http://www.nfu.org/text-index.shtml
Utah Farm Bureau	http://www.fb.com/utfb/
National Cattlemens Association	http://www.beef.org/

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This report is published as a cooperative effort between Federal and State Government.

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We would like to thank Ron Daines, editor, Western Farmer-Stockman Magazine for providing the cover picture; Debra Spielmaker, Utah Agriculture in the Classroom, and John DeVilbiss, USU Extension Information, for providing some of the photographs used in this publication.

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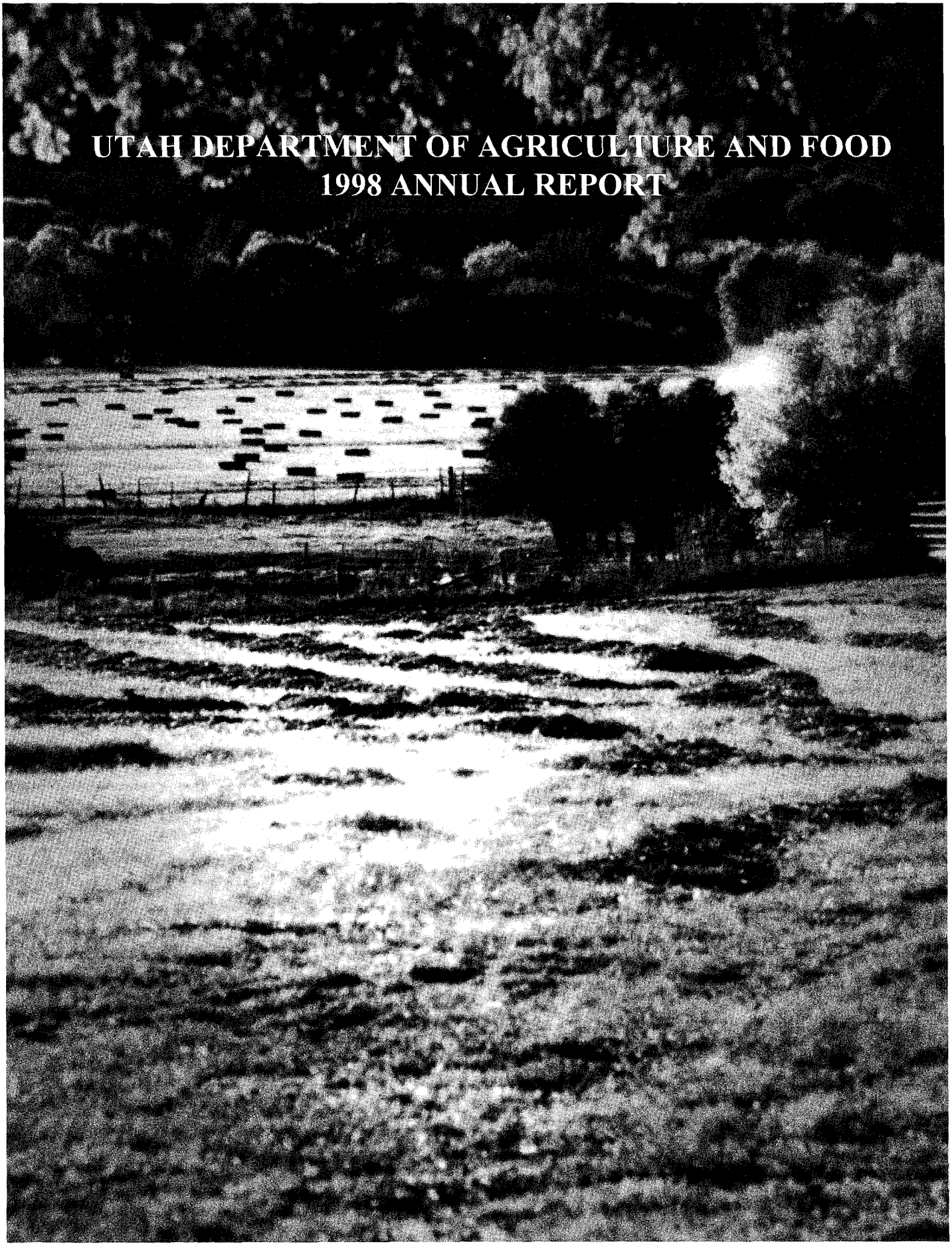

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- GIS.....538-9904
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- Livestock & Market News.....538-7109
- Environmental Quality Information Specialist538-7098
- Soil Conservation.....538-7171

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Animal Damage Control.....975-3315
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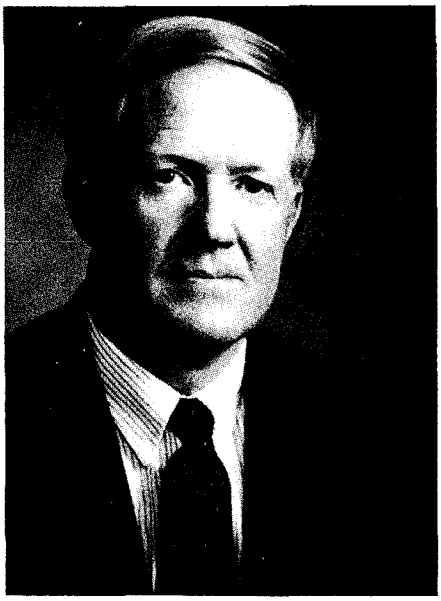
- Weights & Measures.....538-7158

Commissioner of Agriculture
Cary G. Peterson



Thank you for your interest in Utah agriculture.

I recently witnessed an incredible event. A convention of the leaders of the world's food industry. These leaders represented companies such as Kraft, General Foods, Nestle, Coca Cola and other food producing giants whose products are in every American home, and whose economic impact on our country is unparalleled. I was very proud to know that Utah and American agriculture is helping to fuel these giants.

Agribusiness in Utah is doing very well. Our farmers, ranchers and food producers generate about a billion dollars in sales a year and contribute more than 6,000 jobs to our state. The raw and value added food products that are exported from Utah generate nearly $300 million a year, and that number is growing. But the supply line from the field to the table is being challenged by suburban sprawl. Each year fewer and fewer farm acres are being harvested in Utah and around the country. The loss of such resource producing land is an issue that affects us all. I am encouraged to see the increased public awareness of the consequences of the loss of our prime farmland.

This is the Year of the Farmer in Utah. As such we are celebrating the important contributions farmers and ranchers make to our lives. You may hear about it on the radio, read about it in the newspapers and see the commitment to it at the 1998 state fair. Please join many of agriculture's friends by supporting--at your city or county planning commission meetings and elsewhere--the concept that more farm and ranchland acres is better then fewer acres. I am reminded of the importance of protecting our farmland resources every time I sit down for a meal or see a new Utah food product exported to an emerging nation.

Thank you,

Cary G. Peterson, Utah
Commissioner of Agriculture and Food

Mission Statement

The mission of the Utah Department of Agriculture and food is to insure a high-quality, safe, readily available and sustained supply of food and fiber for the citizens of the state of Utah.

In doing this, we will promote the responsible stewardship of our state's land, water and other resources through the best management practices available. We will promote the economic well-being of Utah and her rural citizens by adding value to our agricultural products. We also aggressively seek new markets for our products. And we will inform the citizens and officials of our state of our work and progress.

In carrying out that mission, department personnel will take specific steps in various areas of the state's agricultural industry, such as the following:

Regulation

Department operations help protect public health and safety as well as agricultural markets by assuring consumers of clean, safe, wholesome, and properly labeled and measured or weighed products. This includes products inspected by UDAF's animal industry, plant industry, weights and measures, and food and dairy inspectors, compliance officers and field representatives. It involves chemical analysis by the state laboratory, which is part of the department. It also includes other consumer products such as bedding, quilted clothing and upholstered furniture.

This inspection also protects legitimate producers and processors by keeping their markets safe from poor products and careless processing.

Conservation and Enhancement

Through its variety of programs in this area, the department will work to protect, conserve and enhance Utah's agricultural and natural resources, including water and land, and to administer two low-interest revolving loan funds aimed at developing resources and financing new enterprises.

Marketing and Promotion

UDAF marketing section strengthens Utah's agriculture and allied industries financially by expanding present markets and developing new ones for Utah's agricultural products, locally, in the United States, and overseas as well. It also helps develop new products and production methods and promotes instate processing of Utah agricultural products for a stronger state economy.

Left: An example of high tech equipment at work protecting the food supply. A Fassio Egg Farms employee uses an electronic "wand" to mark cracked or damaged eggs that will later be removed by computer.

Bottom: Utah food producer AFI gets national media attention from CBS News at the U.S. Food Export Showcase in Chicago in May. Utah's export food pavilion was featured by national and local news organizations. Utah generated $300 million in export sales in 1997.

Commissioner's Office

A greater emphasis on food safety, quicker enforcement action and accelerated work to preserve critical farm and watershed resource land are three of the major accomplishments for 1997 and 1998.

For the first time since Governor Leavitt's 1995 Growth Summit, the Utah Legislature set aside funds to protect critical resource lands and other open spaces. SB 51 set aside $100,000 for the LeRay McAllister Critical Land Conservation Revolving Loan Fund. Lawmakers also set aside $100,000 to purchase easement rights and take other action to protect Utah farmland resources. HB 276, also set aside $400,000 to help keep critical farmland and other resource land productive.

Commissioner Peterson also took steps to allow for swifter enforcement of the Agricultural Code in the field. Compliance rules were tightened to allow inspectors to immediately cite or stop illegal practices that threaten the agricultural environment and the food supply.

The commissioner defended the Central Utah Water Project from those who would backtrack on the promise to complete it. The project would bring irrigation water to Utah and Juab County farmers and develope another farming resource in Utah.

Utah's soil conservation interests worked to improve the land through various land management practices including the controversial method of "chaining." Attention was drawn to the positive effects of chaining during a demonstration in May, 1998 where land that was earlier chained and seeded produced taller and fuller growth patterns of grass as opposed to land that was not chained, which produced annual weeds.

The first of its kind Internet chat room helped Commissioner Peterson teach the values of Utah Agriculture to 35 5th and 6th grade students at Salt Lake City's Backman Elementary school during National Agriculture Week. The department's computer specialists developed the chat room which allowed the students to directly asked the commissioner questions about agriculture. A sample of the conversation follows:

Question: What is the biggest crop in Utah?
Answer: Alfalfa.
Question: How do you store water in the mountains?
Answer: Through snow and rain runoff and a good reservoir system.
Question: What happens if we don't have enough land to raise proper crops or animals for the population?
Answer: We won't produce enough food, and the cost of the food that we have becomes very expensive. In Russia, if people don't develop their own gardens and grow food for themselves, they don't eat. Also if your food costs too much then your parents wouldn't have any leftover money to buy you things you like.

1998
YEAR OF THE FARMER

The National Association of State Department's of Agriculture (NASDA) elected Commissioner Peterson to the position of President-Elect of the organization. As such, he will become president of the group in the fall of 1998 and become a leading representative for U.S. agriculture through 1999. The UDAF will host the annual NASDA convention in September, 1999 in Southern Utah.

With the Commissioner's support, Governor Leavitt and the Utah Legislature declared 1998 the Year of the Farmer. Various community and agricultural groups held events recognizing the contributions made by Utah farmers and ranchers. A partnership between the UDAF, the Utah Farm Bureau and the Utah Association of Conservation Districts produced radio spots for state-wide airing that remind Utahns of the value of Utah agriculture.

For the Future

Commissioner Peterson will take a proposal to various water, wildlife and transportation groups to add a boatable waterway to the alignment of the Wasatch Front Legacy Highway. The proposal would concentrate sources of water in Western Salt Lake and Davis Counties while adding a recreation and transportation asset to the state. The waterway could be used for travel and recreation, and add to the legacy of the highway.

Commissioner Peterson and his division directors moved the department toward several important goals to improve Utah agriculture, Utah agribusiness and Utah's food supply.

The 1998 Gypsy Moth eradication program successfully treated nearly 1,000 acres of trees and shrubs in Salt Lake County's Knudsen's Corner and in Little Cottonwood Canyon.

Van Burgess
Deputy Commissioner
Utah Department of
Agriculture and Food

A small infestation of 47 moths was detected in 1997, prompting the reactivation of an aerial spraying program that proved successful in 1993.

The Division of Plant Industry took major action to prevent the spread of the Japanese beetle into Utah. The division halted the shipment of thousands of shade and fruit trees into the state that were suspected of being infested with the beetle--a highly destructive insect to lawn turf, crops and trees. The division halted sales of the suspect products, required treatment of some tree stock and demanded the return of the trees to the shippers.

The Division of Animal Industry, working with the Bureau of Land Management, the USDA and the Ute Indian Nation, discovered and treated one of the largest outbreaks of Equine Infectious Anemia (EIA) in the West in the Spring of 1998. The outbreak was isolated to BLM and Ute Tribal land approximately 30 miles south of Vernal, Utah.

University research that will promote smart and environmentally friendly farming continued to be emphasized in 1997-98. Proposed research will explore methods of controlling insects through the "mating disruption" concept. Researchers will study ways to introduce sterile male insects into infested orchards or fields as a way to control or eliminate populations of cottling moth, mites and other harmful insects.

Tougher enforcement of disease and insect protection codes has resulted in expanded export of Utah agricultural products to other states and countries. The action against the Japanese beetle protected the state's multimillion dollar nursery and landscaping industries. Other UDAF certification and inspection programs allow the state's largest crop--alfalfa--to be exported to California and other western states.

Improving animal health in the aquaculture industry was the driving force behind the consolidation of two aquaculture boards. The Fish Health Board and the Aquaculture Advisory Committee were combined into the Fish Health Policy Board. The change sought to improve the communication and cooperation between the UDAF and the Utah Department of Natural Resources regarding fish health matters.

Food and Agriculture Exports Set Record

Utah food and agriculture producers and processors continued to set records for exports in 1996-97. As in each previous year's record in the 1990's, the past year saw exports increase to $290 million. As global companies continue to discover Utah, high quality food and agriculture products are finding new customers worldwide. The Pacific Rim continues to be a growing destination for Utah's high value food products. Livestock and livestock products continue to be the foundation of export growth, with dairy products, alfalfa hay, poultry and fruit doing well.

Environmental Quality Section

In a time of budget cutbacks in many federal, state and local government programs, Utah's NPS water pollution control program is growing. Since 1990 more than $5 million has been spent in the Little Bear River watershed in Cache County to stabilize stream banks, control animal waste, revegetate soil and manage ranges. Similar efforts have been continuing in the Otter Creek watershed in Central Utah and the Chalk Creek watershed in Summit County.

Food Safety

Enhancing Utah's food safety programs are a top priority for the Utah Department of Agriculture and Food. A new Food Protection Rule was adopted in March. The rule contains state-of-the-art food safety practices and provides construction requirements for new and remodeled food establishments. The adoption of this rule will promote uniformity for industry, and consistency/standardization between FDA, states, and local health departments involving both interstate and intrastate commerce.

UDAF Fish Health Program

By the end of 1997 there were 78 commercial aquaculture and fee fishing facilities registered with the Fish Health Program. New applications, primarily for fee fishing sites, continue to be filed. This illustrates the continued interest in aquaculture in Utah.

Fish Health Inspections --Twenty-two aquaculture sites were tested for the presence of prohibited pathogens this year. The whirling disease pathogen was found at one of the sites. No other pathogens were found.

Meat and Poultry Inspection

The Bureau has entered the first phase of Hazard Analysis, Critical Control Point (HACCP) system of inspection. This first phase concentrates on Sanitation Standard Operating Procedures. This is a dramatic move away from the command and control philosophy which has been the norm in the past. With this new system the meat and poultry establishment owners are required to develop a sanitation standard operating procedure which is a document stating what will be done, how it will be done and who will do it.

1998 Legislative Action

Deputy Commissioner, Van Burgess and Commissioner Peterson assisted Utah Legislators in 1998 as lawmakers considered and acted on numerous agriculture-related bills. Listed here is some of the legislation that most affected Utah farmers and ranchers.

SCR 3, Resolution Declaring 1998 the Year of the Farmer (A. Myrin) Declares 1998 the year of the farmer and urges the public

to reflect on how farming, ranching, and agriculture in general greatly impact their way of life. The resolution was the first bill to pass both houses.

SB 11, Transplants of Wildlife (A. Myrin) Allows the DWR to transplant certain wildlife species only in accordance with plans or agreements designating transplant sites and creates procedures for the preparation, review, and approval for such plans.

SB 16, Transfer of Agriculture Land Within City (R. Muhlestein) Allows for the transfer of agricultural lands within a city without going through the subdivision process if neither the resulting combined parcel nor the parcel remaining from the division or partition violates an applicable zoning ordinance.

SB 51, Critical Land Conservation Revolving Loan Fund (L. McAllister) Creates a revolving loan fund to finance and preserve open space. A fifteen member committee is also created to administer the fund.

SB 134, Soil Conservation Special License Plate (A. Myrin) Authorizes the creation and issuance of a soil conservation license plate. The proceeds will be treated as voluntary contributions to benefit soil conservation districts.

HB 50, Local Option Sales Tax for Conservation Easements for Agriculture Use (E. Olsen) Bill failed--Would allow counties to impose up to 1/8 percent sales and use tax to acquire conservation easements for agricultural uses. However, $100,000 was appropriated to the UDAF through the Appropriations Act as one time money to fund agriculture preservation projects.

HB 74, Agriculture Protection Areas (E. Anderson) Allows for the creation of agricultural protection areas in cities and towns.

HB 206, Eco-terrorism Prohibition and Penalties (D. Iverson) Enhances criminal penalties for criminal acts intended to obstruct or impede the lawful management of forest, or agricultural activities.

HB 276, Conservation district Technical Assistance Appropriation (B. Johnson) Appropriates $400,000 to the UDAF for distribution to Soil and Conservation Districts.

HB 407, Aquaculture Amendments (D. Ure) Streamlines the Aquaculture Advisory Council and the Fish Health Board into a single, seven-member board. The board will set policies and regulations governing disease threats to public and private fisheries and set rules and procedures for prevention and diagnosis. An emergency response team was also created. The UDAF will continue to administer private fisheries.

HJR 11, Rehabilitation of Wildfire-Damaged Lands Resolution (B. Johnson) Supports the efforts of the BLM, DWR, USFS and the School and Institutional Trust Lands Administration to rehabilitate lands damaged by wildfire through the use of chaining and reseeding.

Century Farms and Ranches

The Century Farms and Ranches Program continues to receive applications for inclusion in the program. This is the third year of a continuing program to honor family ranches and farms that have been operating for 100 years or more. Owners are scheduled to be recognized during ceremonies at the State Fair in Salt Lake City. Applications for inclusion in the program are available from the UDAF or the Utah Farm Bureau.

Agricultural Investigation and Compliance

The department's Compliance Specialist, working with the Attorney General's Office, investigates violations of department statutes and rules. The specialist works with division directors enforcing actions resulting from administrative hearings.

The Agriculture Investigator also works with the Wildlife Services program carrying out predator control on public and private rangelands. The program protects Utah livestock and wildlife. The program is affected as regulatory challenges of federal agencies arise--predator control suffers and livestock losses increase.

A major responsibility is to protect Utah producers and consumers by licensing and bonding all individual who buy and sell agricultural products.

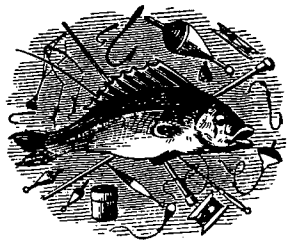
In 1997, the Compliance Specialist successfully drafted changes to the Administrative Rules giving field inspectors increased authority to halt illegal practices wherever an infraction is discovered.

Public Information Office

The Public Information Office is an important link between the public, industry, employees, and the Utah Department of Agriculture and Food.

The office disseminates various publications such as the Ag. News, Utah Agriculture and the department's annual report, as well as creating displays and publications highlighting the services of the UDAF. The office also generates news releases and articles for the public press as well as for various industry publications.

The information office oversaw the creation and implementation of an Internet chat session between Commissioner Peterson and students at Salt Lake City's Backman Elementary School during National Agriculture Week. The first of it's kind event was aimed at educating students about the importance of agriculture in their lives. The information office also coordinated an essay contest among Utah FFA students during National Agriculture Earth Day. The event was cosponsored by the Utah Chapter of the Sierra Club, and was intended to demonstrate the link between agriculture and the environment.

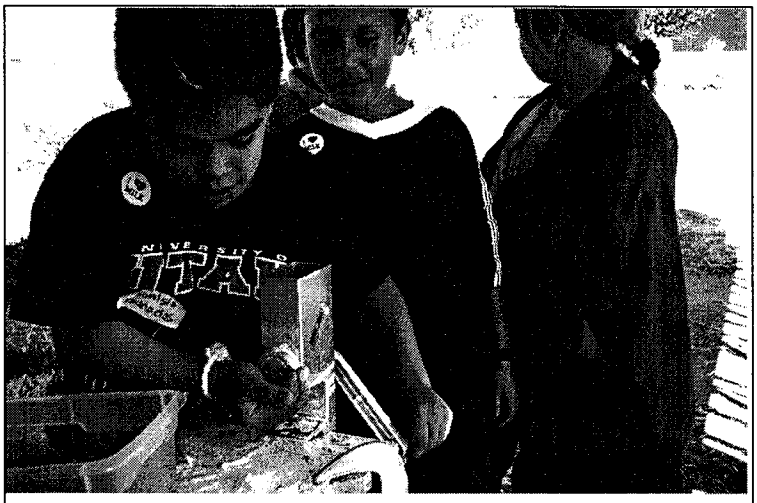


Foundation for Agriculture in the Classroom

The following report is offered by AITC Project Coordinator, Debra Speilmaker

Utah Foundation for Agriculture in the Classroom (UFAC) partners with Utah State University Extension to fund a full-time Agriculture in the Classroom Project Coordinator, and part-time student assistant. This is a summary of the projects we have been working on during the 1997-98 school year:

University pre-service (teacher education) continues to be one of our major programs. Pre-service workshops have been conducted every semester/quarter in five of the six University Teacher Education Programs. Elementary education seniors in their methods courses have been introduced to our program and materials. This year we developed a new "Field Guide to Utah Agriculture in the Classroom " This booklet gave them some easy and fun activities that can be used in the classroom immediately. These students are hungry. They request our materials while student teaching. The teacher educators call early to get our program on their syllabus. We are convinced this is one of best ways to educate teachers, before they leave the university.



Students from Wendover, Utah lean how to turn wheat into flour during one of the many farm field days coordinated by Utah's Agriculture in the Classroom Program.

Microorganisms in Agriculture was the major theme for our in-service program this past year. Microorganisms is a required subject in the 6th grade and so a program was developed to teach the concepts using agriculture.

Our newsletter, the "Bulletin," is distributed three times a year. We did a "readers survey" this year and updated our mailing list. We lost some teacher contacts, but we will be saving money! The reader survey gave us some great input about how to improve our newsletter. We hope to rebuild our readership in the coming year.

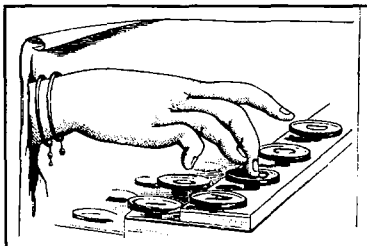
Farm field days/agricultural field days have been an activity carried out by various counties in the state for several years. Farm field day packets were developed by AITC and distributed to teachers at 12 county farm field days. The packets included our new "Field Guide to Agriculture in the Classroom," booklet, grade appropriate agricultural literacy tests, and commodity group information. These packets were distributed to over 400 teachers.

Our web-site (http:ext.usu.edu/aitc) is our most cost effective project. Approximately 95 percent of our Utah teachers our connected to the Internet, and 100 percent of our pre-service teachers. The site is visited, on an average, 300 times a week! This has kept our Resource Lending Center very busy. Requests come from all over the country, even Alaska!

We will have three large exhibits at the Utah State Fair. These exhibits will be part of a larger exhibit called "Agriscience and Technology: Pioneering Agriculture." This exhibit will have corporate sponsorship and run for 3-4 more years at the fair. The AITC program will be responsible for three "classrooms." One room will be for 10 minute presentations, one room will be a "story-time" room featuring agricultural books. The last room will be an "Ag-Art" room that will allow kids to make art projects using agricultural products, beyond paper!

The Foundation sponsored an award for the most Outstanding-Food For America Program conducted by a FFA Chapter. Ten chapters applied in this our third year. We received good feedback from students and ag teachers. We recognized all entries, and awarded the top three winners with a check and plaque. This summer we will conduct workshops for FFA Chapter Officers at their Leadership Conferences. We hope to increase the number of chapters doing Food For America Programs promoting Agriculture in the Classroom.

Our program received a $32,000 grant this year to develop a soils video and educators guide, "Dirt: Secrets in the Soil. " The video is interactive and used to enhance the educators guide. The lessons are being pilot tested and the video is in final editing. In-service workshops are scheduled for this summer, and because of popular demand, will be scheduled throughout the fall. Soils is part of the 4th grade state requirements.



Administrative Services

Renee Matsuura
Director

The goal of Administrative Services is to provide continuous, efficient and high-quality administrative support and services to the public and to agency users to assist the over all development of agriculture in Utah. Our motto is to provide exceptional customer service.

Financial Services

Purchases goods and services for the department, process, audit and enter vendor payments, and insure accounting policies and procedures are used. Enter and audit instate and out-of state travel reimbursements electronically to provide repayment to employees within two days. Fixed assets are tagged and surplused appropriately. Mail distribution , payroll, reception, petty cash, receipt of cash, and motor pool.

Budget

The financial staff prepare budgets for review by the governor's office and the legislature. Work plans are developed by division director's and program managers to meet program needs. Monthly status reports and projections are generated for six divisions and twenty-six programs. These report provide data to monitor expenditures and insure budgets are within the appropriated funds.

Federal Grants

Administrative staff prepare and review grant requests, oversee and track expenditures for reimbursement. Reimbursement of expenditures are made bimonthly and funds are transferred electronically to the state within two days.

Enterprise and Internal Service Funds

Accounting staff prepare financial documents for internal service funds and enterprise funds. The department's trust funds are managed to include investing and divesting funds with Utah Public Treasure's' Investment Fund.

Licensing

More than 10,000 new or renewed licenses are processed annually in thirty-six categories for ten regulatory programs, such as: livestock dealers, livestock markets, nursery's, beekeepers, upholsterers, weighman, and etc.

Accounts Receivable

The state has implemented a new advanced receivable system to be used by state agencies to improve collecting revenues for services provided. A few agencies and programs were exempted from the use of this system due to the complexity of their operations. The department's grain inspection program was fortunate to receive that exemption. Many hours were spent by technical support staff and administrative accounting staff from converting names to the new system to training employees and providing support to divisions. Letters were sent to valued customers to inform them of the changes in their billings and invoices that penalties and interest will be charged and if invoices are not paid within 60 days the system automatically sends them to a state contracted collection agency.

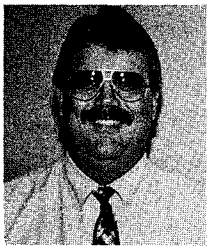
Information Technology Services

Staff include a programmer analyst and a technical support employee that support the department's local area network (LAN) and programmer analyst that supports the unix system for geographical information system (GIS). The LAN is the main connection for all employees within the department to access department customized programs. The LAN is our gateway to the wide area network (WAN) to provide connection to the state's main frame system to provide better service to the public, also allows internet connection to the rest of the outside world for additional advanced technology and information. The internet is now an integral part of doing business. Support staff use the internet to find vendors, commodity codes, technical information for laboratory analysis techniques, market news, federal regulations, Utah code and etc. All state agencies now have a web site to provide the public with information and also have links to other sites.

Personnel

The personnel office is an information office to service employees when first employed. They insure employees are given the proper orientation as a state employee. Employees are informed of the programs available to them if needed. These services include American Disability Act (ADA) in which employees may request an accommodation such as improving the work area ergonomically or change of work hours, and etc. A few years ago the Family Medical Leave Act (FMLA) was implemented . To insure employees could take up to 12 weeks leave for the birth of a child, adoption of a child, placement of a foster child, a serious health condition of the employee or care of a spouse, dependent child or parent with a serious medical condition. Eligible employees shall continue to receive medical insurance benefits provided the employee was entitled to medical insurance benefits prior to the commencement of FMLA leave. Other requirements regarding this request are provided in Human Resource Rules. Other services include general information regarding personnel issues.

Ag. Marketing & Conservation



Randy Parker
Director

The goal of the Division of Agricultural Marketing and Conservation is two fold: 1) To assist in the economic development of production agriculture; and 2) To protect and enhance the state's natural resources. The division works with agricultural producers and agribusinesses in expanding markets, adding value to locally grown commodities, developing new products and promoting within the state value added processing for local, national and international markets. In addition, the division works with food producers to protect and enhance the soil and water resources of the state through conservation and quality improvement programs.

Food and Agriculture Exports Set Record

Utah food and agriculture producers and processors continued to set new records for exports in 1996-97. As in each previous year's record in the 1990's, the past year saw exports increase to $290 million. As global companies continue to discover Utah, high quality food and agriculture products are finding new customers worldwide. The Pacific Rim continues to be a growing destination for Utah's high value food products. Livestock and livestock products continue to be the foundation of export growth, with dairy products, alfalfa hay, poultry and fruit doing well.

Marketing

A major goal of the division is to assist Utah companies in developing markets locally, nationally and internationally to add value to Utah commodities. To assist in this effort, the division has expanded its ability to assist companies in developing marketing strategies and identifying resources. The division distributes various directories and brochures to help production agriculture as well as the fast-growing food processing sector develop new market opportunities.

International Market Development

The division has continued to help Utah food and agriculture entities in global market development. As a member of the 13-state Western United States Agricultural Trade Association (WUSATA) and working closely with the U.S. Department of Agriculture's Foreign Agriculture Service (FAS), the division has assisted value-added food manufacturers in identifying opportunities and strategies for international market development.

Membership in WUSATA has helped the division in a number of export programs and initiatives. Utah consumer-ready foods are eligible to participate in the Congressionally funded Market Access Program (MAP). MAP provides cost-sharing monies to eligible companies that assists in international market development. During fiscal year 1996-97, six Utah companies were approved for nearly $200,000 in matching funds. In addition, the division continues to manage promotional projects in Hong Kong and Japan that helps Western regional and especially Utah companies into these markets.

The division also participates with U.S. Livestock Genetics Export, Inc. (USLGE) to assist in the export of sheep, beef and dairy genetics. This past year the first UTAH LIVESTOCK EXPORT DIRECTORY was printed and has been distributed worldwide. A focus market has been the Mexican market.

Throughout the past year, numerous delegations of international buyers visited Utah companies. An Egyptian delegation investigated dairy export and technology transfer opportunities. Hong Kong and Japanese visitors continue to be the most interested in Utah opportunities. The division also hosted five farm collective leaders from Kyrgyzstan as that country moves from the Soviet satellite system to the marketplace.

The division coordinated Utah and regional participation in the "Great American Cooking Competition" in Hong Kong's largest club store--GrandMart. Utah's participants in this year's event were Gossners Foods' UHT shelf stable milk, Clover Club potato chips and Maxfield's Candies

Great American Food Shows

The division works with FAS to introduce Utah's high quality, consumer ready food and agriculture products to the world through Great American Food Shows. Utah companies interested in new international markets are able to participate in organized U.S. pavilions that attract perspective consumers, importers, wholesalers and retailers.

The division this year managed a Utah presence in three major international shows and assisted participants in other major shows. The division coordinated the Utah pavilion at U.S. Food Export Showcase held in Chicago May 3-5, 1998. The show is sponsored by the National Association of State Departments of Agriculture and attracts over 6,000 international buyers annually. The Utah pavilion under the theme, "Hosting the World in 2002" included: McFarland's Foods, AFI FlashGril'd Steaks, Gossners Foods, Redmond Minerals, Bear Creek Country Kitchens, North American Pet Food, Brigham Young University and the UDAF. Following the three day show participants estimated sales from show contacts at $6.6 million in the next 6 to 12 months.

In addition, the division worked with companies participating in: ANUGA, held in Cologne, Germany - the world's largest food show attracting over 160,000 people during its six-day run; FOODEX, held in Tokyo, Japan - Asia's largest food show attracting over 30,000 people; Food & Hotel Asia, held in Singapore - attracted approximately 10,000 people.

At ANUGA, Europe's NEW FOODS CONGRESS, selected two Utah company products as "new and exciting can't miss" for the European market. McFarland's Foods new patented process for "Chicken Bacon" combines dark and light meat into strips that are given bacon flavoring. The combination of 68 percent less fat for the health conscience and the ethnic opportunities with the Muslim and Jewish communities gave it the New Foods blessing. In addition, AFI's FlashGril'd Steak was cited for its technological advance of taking lower value meat cuts, processing with barbecue flavor and reforming full muscle cuts also received the European groups attention. The Utah companies were two of only four US companies selected.

Agribusiness Development Council

The Governor's Agribusiness Development Council continues to serve as a bridge between UDAF and the Department of Community and Economic Development. With leaders in Utah's food and agriculture industry serving on the Council, it is the catalyst for developing and implementing strategies for adding value to Utah's agricultural commodities and strengthening our rural economy. The Utah Food and Agriculture Directory, a database developed under the direction of the Council, continues to be distributed to a global audience to attract potential business opportunities to Utah. The Council continues to focus on new technology, innovation, niche market development and the finance problems facing food and agriculture.

Product of Utah Program

The Product of Utah program continues to be successful in identifying Utah grown and produced products to local consumers. A broad range of food and agricultural products are more recognizable to Utah consumer because of point of purchase materials, informational brochures, print and electronic media advertizing. In recent years the program has broadened to include non-agricultural items especially in the sports and recreation areas. Utah has become known worldwide as a sports and recreation destination and marketing with an official Utah identification has helped open new markets.

There are currently over 200 companies that participate in the trademarked program. An area of recent success has been international recognition. The Product of Utah logo has been featured by the state and many companies at international trade shows. Utah is fast becoming known for its high quality products and the exciting innovation. You will see the logo on products at the store, in various advertising and feature programs like "Shop Utah" hosed by Margo Watson on KJZZ television.

Market News Reporting

The Market News Section provides a vital service to the state's agriculture and agribusiness community. Market information is critical to the decision making process. Critical information is provided through print media, broadcast media, call-in service, a weekly mail market summary and the most up-to-date information on the department's worldwide web site. The service provides an unbiased market report of market activity. The hay market report compiles both buyer and seller data to provide an accurate, unbiased report. There are currently over 400 subscribers to the weekly report and numerous visits by consumers on our web site. Division personnel or contract reporters monitor livestock auctions in Cedar City, Salina, Spanish Fork and Ogden.

Junior Livestock Shows

The division administers the legislative mandated and funded program to assist the state's junior livestock shows. Funds are allocated through a formula that promotes youth involvement and a quality educational experience. The Junior Livestock Show Association has developed rules with which shows and youth participants must comply to qualify for state assistance. The funding provided by the legislature must be used for awards to FFA and 4-H participants and not other show expenses. During the past year, 18 junior shows were awarded funds to assist in this youth development program.

Utah Horse Racing

The division administers the legislative mandated responsibility of monitoring the Utah horse racing industry and associated tracks. As provided by 1992 legislation, a regulatory process was established, with periodic changes to meet changing needs or based on industry input, to govern Utah horse racing. A five-member Commission appointed by the Governor and approved by the State Senate oversees the process. During the past year, nearly half of the horses running on sanctioned tracks received Rating of Merit (ROM), an index that establishes horse values and stud fees. Without this regulatory system and sanctioning body being in place, Utah quarter horse races and associated times would not be recognized resulting in the loss of millions of dollars of value to our horse industry.

Environmental Quality Section Water Quality

The division's Environmental Quality Section administers the agricultural and education components of Utah's Non-Point Source (NPS) pollution control and prevention program. This section works closely with the Utah Division of Water Quality and is partially funded through a federal grant from the Environmental Protection Agency. Projects are also supported by matching funds from state and local government agencies and private sources. The program is divided into several parts: watershed management projects, which are on-the-ground conservation efforts; and the development of public information and educational materials such as newsletters, brochures, and videos.

In a time of budget cutbacks in many federal, state and local government programs, Utah's NPS water pollution control program is growing. The major reason behind the increase in emphasis and funding is that during the first 25 years after the Clean Water Act was passed, much of the attention and funding went into controlling point sources of pollution originating mostly from industry and municipalities. Point sources of water pollution are usually easier to identify and regulate than are non-point sources. Now that point-source pollution are being better controlled and regulated, non-point sources are getting more attention.

Since 1990 more than $5 million has been spent in the Little Bear River watershed in Cache County to stabilize stream banks, control animal waste, revegetate soil and manage ranges. Similar efforts have been continuing in the Otter Creek watershed in Central Utah and the Chalk Creek watershed in Summit County. A watershed effort in the Beaver River watershed has been slowly gaining momentum and funding over the past few years. 1998 should be a big year for watershed work in Beaver County.

The *Utah Watershed Review* newsletter continues to be the main outlet of information about Utah's NPS program. Individual watersheds with large-scale NPS efforts also publish newsletters. Watershed Review is published six times a year by the Utah Department of Agriculture and Food. For more information about the publication or to be added to the mailing list, call Jack Wilbur at (801) 538-7098.

The Utah Adopt-A-Waterbody program coordinates local groups that want to clean up, fix up or monitor a nearby body of water. There are now about 75 groups that have taken part in this cooperative effort between the Utah Department of Agriculture and Food, the Utah Division of Water Quality, and the Utah Division of Wildlife Resources. While most groups plant stream side vegetation, build trails, or pick up trash, a growing number of groups are conducting water quality monitoring on their favorite stream, wetland or lake. In 1998 Utah State University (USU) Extension will team up with the Adopt-A-Waterbody program to conduct a training seminar for teachers in the Cache County area on how to set up a water quality monitoring program in their schools.

Last year a CD-ROM computer program was completed by USU and the UDAF. The program is designed to teach watershed management skills to students and landowners. This Utah-specific program combines written information, photographs and video clips from watershed projects, with an animated simulation of a farm. This element of the program asks the user to make several watershed management choices. The choice affect the economic stability of the farm, the quality of the environment or both. In 1998 - 99 the two agencies will collaborate or a regional version of the program.

Ground Water and Rangeland

The department's involvement in rural ground water well testing and rangeland monitoring continues to grow. The Utah Ground Water Program checks ground water quality throughout the state as requested by local Soil Conservation Districts. The primary focus of this program is to check irrigation and livestock water quality. Single family wells are also evaluated. The data helps farmers and ranchers in their efforts to increase production and water quality. This past year the Ground Water Program has tested about 75 wells in Juab, Beaver and Morgan counties.

Rangeland is a major resource in the state. UDAF works closely with the Utah Division of Wildlife Resources in monitoring range conditions and trends. This program provides rangeland condition data to ranchers helping them make good decisions. This past year monitoring took place in several central Utah locations. About 150 sites were monitored. Results of the monitoring data will be available by the end of 1998. Monitoring activities in 1998 will include several sites in Pine Valley, Beaver Canyon, Panguitch Lake and Bryce Canyon.

Agricultural Resource Development Loans

Low-interest ARDL loans are available through the Utah Soil Conservation Commission in cooperation with the division's program. ARDL loans are made for a maximum term of 12 years at 3 percent interest with a one-time technical assistance fee of 4 percent. The objectives of the program are to: conserve soil and water resources; increase agricultural yields for croplands, orchards, pasture, range, and livestock; maintain and improve water quality; conserve and improve wildlife habitat; prevent flooding; conserve and/or develop on-farm energy; and reduce damages to agriculture as a result of flooding, drought, or other natural disasters.

The Legislature appropriated $130,000 in FY 1997-98. The ARDL program currently has more than $23.8 million in assets and more than $15.3 million out in loans. More than $40 million has been advanced for improvement projects by the ARDL program since its beginning. The program continues to grow from interest collected on revolving loan funds. There are approximately 903 individual loans outstanding in the program.

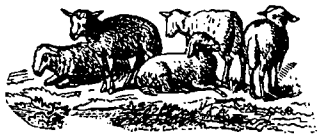
Rural Rehabilitation Loans

The Rural Rehabilitation Loan Program is another source of low-interest loans for farms and ranchers. The purpose of this program is to help those who want to buy, begin or improve an agricultural operation but who have trouble getting conventional financing. The current interest rates for these loans are from 5 to 6 percent. This loan fund was augmented by an appropriation of $1 million by the Legislature to assist distressed farmers in 1992. Total assets for this fund are more than $3.6 million with $2.9 million out in 63 individual loans. Delinquencies in all loan programs are very low. Presently the delinquencies are under .0124 percent.

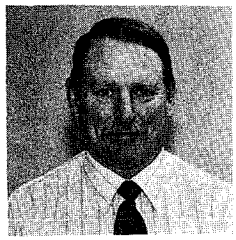
Both the ARDL and Rural Rehabilitation programs have successfully provided assistance to many farmers and ranchers in implementing conservation improvements and practices they otherwise could not afford.

Petroleum Storage Tank Loans

In addition to the agriculture loans, the division manages the Petroleum Storage Tank Loan program in cooperation with the Division of Environmental Response (DERR) of the Department of Environmental Quality (DEQ). The division is responsible for underwriting, closing, documenting and accounting for the loans, and DERR approves the bids, inspects the projects and controls the funding. The applicants are mostly small petroleum retailers whose businesses are in rural areas of the state. The program provides for secured loans of up to $45,000 to finance up to 80 percent of the costs of the individual projects. Terms permit loans of up to 10 years at 3 percent interest and no fees. The program is important in that it allows many small businessmen to remain in business despite the expense of complying with environmental laws and regulations. The level of loan activity is steadily increasing. The $2 million fund is also a revolving fund with loan repayments expected to be available to fund future loans. There is currently $713,086 outstanding in 34 individual loans.



Wildlife Services



Mike Bodenchuk
Director

To help reduce this drain on the state's economy, the U.S. Department of Agriculture and the Utah Department of Agriculture and Food conduct a cooperative program known as Wildlife Services (WS). The program was previously known as Animal Damage Control (ADC). The cooperative program, which includes 18 state hunters and 16 federal employees, is held up as a model of cooperation throughout the nation.

Environmental Assessments (EA's), finalized in 1996, addressed the program's possible environmental consequences. While no significant environmental impacts were noted, changes to the program were indicated which allow WS to better accomplish its mission while protecting agricultural and natural resources.

The alternatives selected allow WS to include protection of wildlife species, notably mule deer and endangered species, when conducting predator damage management activities. The program is financed jointly, with the federal government paying about half and state government and livestock producers paying the balance. In Utah, livestock owners pay a fee nicknamed a "headtax" set by state law. Collection of the head tax changed in 1996 from a billing system to automatic payment at the point of sale. For sheep, the tax is withheld from proceeds of raw wool sales. For cattle it is collected during the brand inspection, and paid by grower cooperatives for turkeys. The change in collection process has allowed stable funding for the WS program.

UTAH SHEEP LOSSES TO PREDATORS - 1997

	Sheep	Lamb
Coyote	3,800	15,200
Cougar	1,300	4,100
Bear	800	1,100
Eagle	0	300
Dog	700	1,100
Fox	0	900
Bobcat	100	200
Other animals	0	400
Total	6,700	23,300

Wildlife Services also assists livestock and wildlife managers in developing non-lethal methods for reducing coyote predations.

The objectives of the program are to minimize livestock and wildlife losses to predators on private, state and federal lands. WS carries out this objective by integrated methods including recommending non-lethal methods for producers to implement and by removing predators when they cause damage. The program targets only offending animals or populations of offending coyotes.

Methods are used as selectively as possible to minimize impacts to other wildlife. Methods used to control coyotes include aerial hunting, calling and shooting, trapping, denning, and M-44 cyanide ejectors.

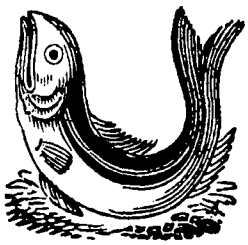
Cougar and black bears also pose a serious problem to livestock producers in portions of the state. Control of predation by these two species is coordinated through the Utah Division of Wildlife Resources, and is limited to offending individuals only. Once predation is confirmed, the offending predator may be removed if it is determined that it poses a continued threat to livestock in the area. State law allows partial payment to livestock owners for confirmed losses caused by bears or cougars. WS employees assist by confirming the vast majority of depredation by these species.

WS also assists producers in developing non-lethal methods for reducing predation. In 1997 a comprehensive summary of non-lethal methods was compiled and supplied to all livestock cooperators to insure that they were aware of non-lethal alternatives. Implementation of these methods are the responsibility of the livestock producers. WS also cooperated with Utah State University in monitoring the use of llamas for deterring predation on sheep. Protection of the state's deer herds continued in 1997. Through a coordinated effort, deer fawning range was protected in 13 deer management units where fawn survival was determined to be very low.

Following the decision set forth in the EA's, one-fourth of the combined budget was spent on the protection of natural resources, often in areas where agriculture and wildlife both benefit. WS will continue to coordinate this effort which assists the state in achieving its wildlife management goals.

Human health and safety concerns are also addressed by the WS program. A cooperative urban wildlife damage program was initiated in 1997 to assist property owners in Salt Lake County address wildlife problems, most often threats to human health or safety caused by raccoons or skunks. WS Specialists also addressed problems associated with bird/aircraft strikes at Salt Lake International Airport.

Even with the WS program in place, losses due to predation were crippling to the livestock industry. WS continues to monitor and adjust the program to address protection to agriculture and the environment.



Animal Industry

Dr. Michael R. Marshall
Director

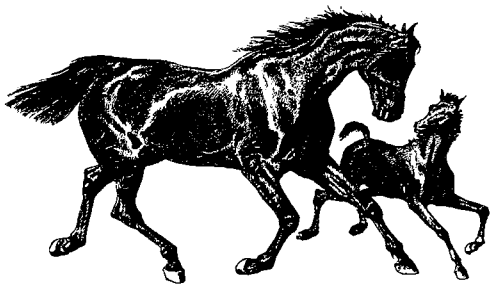
Animal Health

Disease free status was maintained in the following disease categories:

*Brucellosis *Tuberculosis *Scabies
*Pseudorabies *Salmonella pullorum

Disease monitoring programs continued from prior years include those for heartworm, equine encephalitis, equine infectious anemia, rabies, brucellosis, tuberculosis, pseudorabies, salmonella sp., mycoplasma, etc.

Division veterinarians met with the various livestock enterprise groups, farm organizations, veterinary associations and other groups in the state to receive input concerning their needs. Two disease control programs were developed in response to these concerns. The Utah Egg Producers and the Utah Department of Agriculture and Food; in partnership with the Utah Department of Health, USDA, and FDA; developed the Utah Egg Quality Assurance Plan. This is a voluntary partnership which has been called a model for other such plans in the country. The plan identifies 23 critical control points as part of a HACCP plan and describes how each of the agencies and industry will interact to maintain food safety in the egg industry in Utah. Industry discussions also led to the development of health rules for the control of Trichomoniasis in cattle using public range lands and bulls entering the state.



The division protects the multimillion dollar livestock industry in Utah by working to prevent the introduction and spread of diseases among wild and domestic animals in the state.

The department veterinarians monitored livestock imports into the state by reviewing 10,245 certificates of veterinary inspection and several hundred livestock movement reports. Approximately 250 violations of Utah import regulations were investigated, four quarantines were issued, and seven citations were given with fines of $1,982 collected.

Utah experienced another outbreak of Vesicular Stomatitis in 1997. This is a vector borne viral disease of cattle and horses which causes vesicles resembling Hoof and Mouth Disease. Thirty eight cases, effecting only horses, were confirmed, involving four counties in Eastern Utah. Control efforts consisted of quarantining animals to the premises until 30 days following healing of the lesions. Economic impacts experienced with establishing a 10 mile quarantine radius as was done in the 1995 outbreak were avoided.

The reported incidence of Heartworm in Utah doubled in 1997 with 63 cases reported, up from a previous high of 32 cases in 1996. Other diseases of a reportable nature included paratuberculosis - one case, rabies - six cases (all bats), equine encephalomyelitis - one case, equine infectious anemia - four cases, psittacosis - two cases. Notable was a case of screwworm reported by a private practitioner in a dog imported from Panama by his military owner.

Exotic animals and domesticated animals that were traditionally wild consume an increasing portion of department resources. Animals such as bison, elk, ostrich, emu, game birds, exotic pets, etc. continue to increase in popularity. The division continues to monitor disease problems that are peculiar to these various animal populations. One large importer of exotic pets and fish was apprehended after failing to obtain prior entry permits and certificates of veterinary inspection over a prolonged period of time. A significant fine was imposed and the importer has come into compliance. Utah elk farms grew to 10 in number in 1997.

Division veterinarians are involved with certifying Utah agricultural products for export by issuing certificates of veterinary inspection. They performed 31 onsite inspections and issued 509 certificates for brine shrimp being exported. A similar service was performed in the dog jerky industry where 16 onsite inspections were done and appropriate certificates issued.

The division is responsible for licensing hatcheries, qualified feedlot operators, and swine garbage feeders in the state. Fifteen such licenses were issued and onsite inspections were accomplished. The number of hatcheries in the state is increasing in the ostrich and gamebird industries. The division also administers the National Poultry Improvement Plan. This is a voluntary testing program wherein a flock may be certified disease free in several important disease categories. Participants in the program enjoy significant benefits when shipping birds, eggs, and products in commerce.

Animal Health has the responsibility of providing veterinary supervision and service to the livestock auction markets in Utah in furtherance of our disease control and monitoring programs.

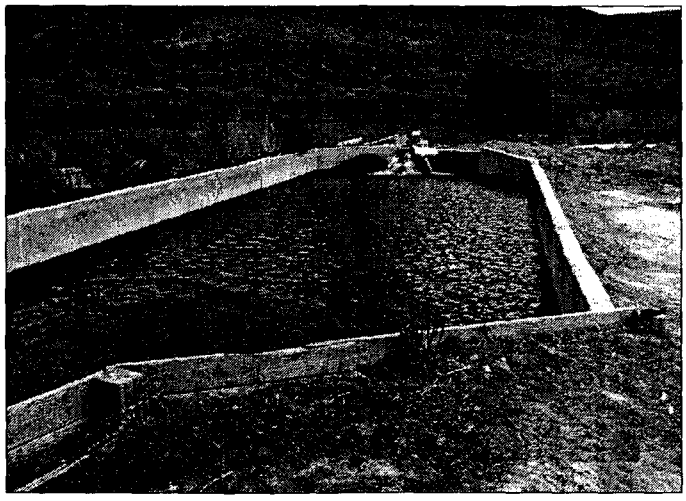
The program is administered by division veterinarians using private veterinarians on contract with the state. More then 500 weekly livestock sales conducted by 10 licensed and bonded sale

yards in the state were serviced under this program. Division veterinarians also provided oversight for veterinarians and technicians involved with brucellosis vaccinations and veterinarians issuing certificates of veterinary inspection for interstate movement of animals. They also provide veterinary expertise for CSEPP, a statewide emergency response organization.

Meat and Poultry Inspection

The Meat and Poultry Inspection Bureau has experienced some significant increases in quantity of services to meet the demands of the meat and poultry industry. In the past year three meat and poultry processing establishments have made application for and have been granted inspection services. These increases in requests for inspection services and the associated increases in work load have been made without increasing personnel. This has been accomplished through efficient scheduling of the inspection work force utilizing the Performance Based Inspection System; a computer program initiated two years ago.

The Bureau has entered the first phase of Hazard Analysis, Critical Control Point (HACCP) system of inspection. This first phase concentrates on Sanitation Standard Operating Procedures. This is a dramatic move away from the command and control philosophy which has been the norm in the past. With this new system the meat and poultry establishment owners are required to develop a sanitation standard operating procedure which is a document stating what will be done, how it will be done, and who will do it. Bureau employees will monitor the records kept by the establishment to verify plant performance. In addition to records verification the Bureau employee will perform tasks scheduled to be completed by the PBIS computer system. This is a decided departure from the past where inspection took the responsibility of making sure the packing plant followed the required sanitation steps. With the new system the inspector will monitor and evaluate the effectiveness of the sanitation plan the management of a meat and poultry packing has developed. Only if the plant fails to follow their own written procedure or take the appropriate corrective action will the inspector take control of the situation to assure proper sanitation is maintained.



Private fish hatcheries like this one in Southern Utah are among the dozens of facilities regularly monitored by UDAF Fish Health inspectors. Since 1994, when the Legislature gave the responsibility for fish health to the UDAF, there has been no known spread of whirling disease from any private hatchery to any public waters or to public hatcheries.

Hazard Analysis, Critical Control Point (HACCP) inspection is a mandatory program. At present only the larger plants with more than 500 employees are required to have a HACCP system in effect, however, all meat and poultry packing plants will be required to have a HACCP system in place by the year 2000. The Hazard Analysis Control Point inspection system is the scientific basis for inspection to the future, in attempting to minimize product contamination with pathogenic organisms. Many of the meat and poultry producers have initiated HACCP programs in their plants even though it has not been required at present. HACCP training has been provided for many of the inspection personnel in the bureau, however, due to numerous changes in the regulations additional training will take place prior to implementation of the final rule. This program identifies the critical control points, throughout the production process, at which product is most likely to become contaminated or adulterated with pathogens. In addition to the Hazard Analysis Critical Control Point inspection system the Bureau will enter into microbiological testing of finished product to verify establishment adherence and compliance with current regulations.

Training is a vital part of meat and poultry inspection and has been given top priority in the development of all inspectors. The bureau has established a training program which has been certified as being equal to that of federal programs.

Fish Health Program

By the end of 1997, 78 commercial aquaculture and fee fishing facilities were registered with the UDAF, Fish Health Program. New applications, primarily for fee fishing sites, continue to be filed. This illustrates the continued interest in aquaculture in Utah.

Fish Health Inspections --Twenty-two aquaculture sites were tested for the presence of the prohibited pathogens this year. The whirling disease pathogen was found at one of the sites. No other pathogens were found. Two issues of "Aquaculture in Utah" newsletter were published in 1997. Articles dealt with water quality, feeding, various diseases and pathogens, aquatic nuisance species, brine shrimp, regulation changes, and services available through the Fish Health Program.

Customer Service -Services extended to clients and the public include numerous consultations and distributions of information on aquaculture and fish diseases, 23 on site water quality tests, 18 diagnostic services involving fish losses and laboratory work at the Smart Veterinary Diagnostic lab, detection of a virus for the first time in crayfish in Utah, 18 brine shrimp inspections for health certificates, four quarantines, two inspections of laboratories that provide services to Utah's fish health program, issuing 33 and 48 CORs respectively to commercial aquaculture and fee fishing facilities, issuing 60 fish health approvals, issuing 68

entry permits, improving the registration process, review of proposals for research and project development, and preparing information for the news media.

Policy Statements - The Fish Health Program continues to develop and implement new policies on various topics, such as, Asian tapeworm, border crossings, whirling disease, biosecurity, registration procedures, and import regulations. Continuing education - Program personnel have taken additional training to enhance their knowledge and effectiveness to deal with fish health issues, customer service, and state employment.

Personnel - The fish pathologist was designated program head and granted adjunct professorship at Utah State University.

Livestock Inspection

The Livestock (Brand) Inspection Bureau consists of 14 full-time special function officers and 50 part-time inspectors. Their job is to protect the Utah livestock industry from theft of livestock. In addition to inspecting all cattle and horses at the state's 10 weekly auctions, field inspections are done on all livestock prior to changing ownership, leaving the state, and going to slaughter. During 1997, 720,000 individual cattle and horses were inspected with $1.4 million worth of livestock returned to their proper owners.

Renewal of some 20,000 livestock brands and earmarks was accomplished in 1996. As mandated by law, the process occurs every five years in order to keep brands current. In addition to each brand owner being listed in the Centennial Brand Book, the department issued everyone a laminated wallet-size proof of ownership brand card. The ownership card is intended for use during travel and when selling animals at the auctions. It is the intent of the bureau to publish a brand book supplement in the fall of 1998. The Centennial book and supplement are available to the public at a cost of $25. The bureau recorded 642 new brands during 1997 and are seeing more interest in the recording of brands for horses.

The brand department started collecting the cattlemen's part of predator control money in 1996. During 1997 livestock inspectors added a 25 cent per head fee to the brand inspection when calves or cull cows were sold totaling $120,000. This money, like the beef promotion money which as been collected by the brand inspectors for many years, will simply be forwarded to the Wildlife Services Program for its use. Sheepmen will continue to have their allotment collected by the wool houses and forwarded to the department.

In an effort to assist and give training to the state's port-of-entry personnel, a livestock inspector was assigned to work monthly in each port-of-entry. These inspectors are authorized and equipped to chase down those livestock transporters who ignore the signage requiring all livestock hauling vehicles to stop. This is an effort to help prevent diseased animals from entering, and stolen animals from leaving the state

During the 1997 legislative session, the Domestic Elk Farming bill was passed allowing the farming of domestic elk on an individuals private property. The brand bureau has been ask to regulate this new industry. Livestock inspectors are involved in the inspection of new facilities and elk as they come and go from each licensed farm. They help verify identification, ownership, health and genetic purity of every animal. Within the first six months of the passage of this law, ten new farms were licensed. An eight member elk advisory council was also formed to make recommendations and give direction to this new industry.

Serology Laboratory

The primary mission of the serology laboratory is to conduct tests on blood and milk samples to help protect the health of animals and humans.

In 1997 the serology laboratory conducted the following test:

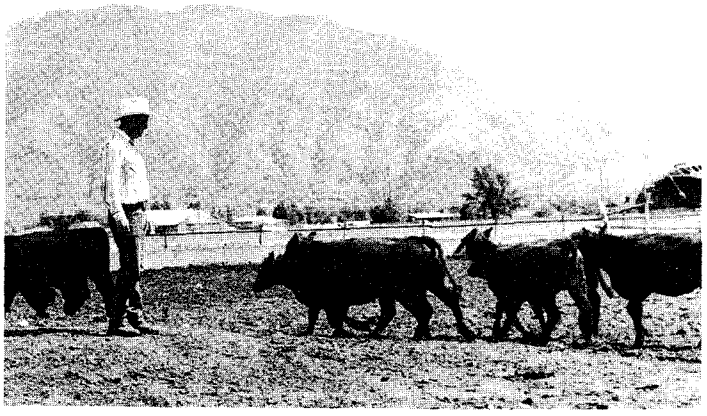
-Brucellosis serology tests	56,303
-Brucellosis ring tests (milk)	7,359
-Rivenol brucellosis confirmation tests	314
-Equine infectious anemia tests (coggins)	643
-Other miscellaneous tests	9

During the 1997 year the laboratory dispensed 86,165 doses of Strain 19 and RB-51 brucellosis vaccine. In addition 80 vials of tuberculin tests reagent were dispensed.

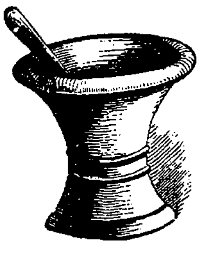
The laboratory staff and other animal health personnel issued 1,669 import permits for livestock, poultry and other animals.

During 1997 the serology laboratory initiated the use of the Rapid Automated Presumptive (R.A.P.) test. This new method is performed on a computer/instrument and prints out the test results.

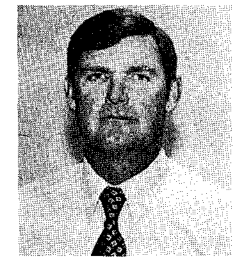
The laboratory also initiated a new supplemental Ring Test called the heat inactivated Ring Test (H.I.R.T.). This test is more specific than the routine Ring Test and thereby eliminates most false positive tests.



Brand inspector Larry Daybell checks brand markings of a herd of cattle in Utah County. Daybell is one of 60 UDAF livestock inspectors who protect Utah livestock buyers and sellers by assuring poroper ownership of animals for sale.



Chemistry Laboratory



Dr. David H. Clark
Director

The Utah Department of Agriculture Chemistry Division operates as a service for various divisions within the Department of Agriculture. The division laboratories provide chemical, physical, and microbiological analyses.

The majority of the samples analyzed are collected and forwarded by various field inspection personnel from the Divisions of Plant Industry, Regulatory Services, Animal Health, Marketing and Conservation, and Federal and State Meat Inspection Programs.

Feed, fertilizer, meat and meat products, pesticide formulation, finished dairy products, and filling material in bedding, garments, and furniture are tested for specific ingredients as indicated by the associated label guarantee. Some products are also examined for the presence of undesirable materials, such as filth, insects and rodent contamination, adulterants and inferior products.

The *Dairy Microbiology Laboratory* tests in four major areas: Grade "A" Raw Milk, Industry Laboratory Certification, Quality Milk, and Consumer Products. This laboratory is certified by FDA to test for standard plate count, coliform count, microscopic and electric somatic cell counting, antibiotics, monitoring pasteurization efficiency, fat and water contents. The laboratory is certified as the FDA Central Milk Laboratory for the State of Utah, and through our supervisor, serves as the State Milk ℞⅓⅔¹¥ ᶜR⅓ᴺL¹ᶜRRs Evaluation Officer (LEO) which has jurisdiction over all certified milk labs within the State. Currently, there are eight (8) facilities listed with 28 analysts under the LEO's jurisdiction. The LEO sets up yearly proficiency testing on all analysts and is responsible for on-site evaluation and training of all certified analysts throughout the State.

The *Meat Laboratory* analyzes meat and meat product samples obtained during inspections of plant and processing facilities that conform to USDA standards. Tests for levels of fat, moisture, protein, sulfites, and added non-meat products ensure label compliance from Federal and State inspected facilities.

The *Pesticide Formulation Laboratory* is primarily concerned with testing herbicides, insecticides, rodenticides, and fungicides to ensure that the listing of active ingredients and their concentrations are in compliance with state labeling laws.

The *Pesticide Residue Laboratory* tests for and determines the levels of herbicides, insecticides, herbicides and fungicides in plants, fruits, vegetables soil, and milk products when inspectors suspect there may be a misuse of the product and as a monitoring program to ensure public safety.

Commercial feed samples are brought to the *Feed and Fertilizer Laboratory* where they can be analyzed for moisture, protein, fat, fiber, minerals, antibiotics, and vitamins. Fertilizer samples can be analyzed for nitrogen, phosphorus, potassium, sulfur, iron, chlorine, calcium, magnesium, boron, chlorine, cobalt, copper, manganese, zinc, and sodium. All feed and fertilizer results are compared to label guarantees to ensure compliance with state labeling laws.

Special Consumer Complaint Samples are also examined for the presence of undesirable materials such as filth, insects, rodent contamination and adulterations. Laboratory analysts check to see if complaints are valid, and if they are, turn the matter over to Department Compliance Officers for follow up actions.

Ground and Surface Waters are monitored for the presence of undesirable chemicals such as pesticides and nitrates. Information is combined with other water quality data to provide base line information on the quality of the state aquifers.

Accomplishments:

The acquisition of a near infrared reflectance spectrophotometer will allow the feed and meat laboratories to measure many different things (e.g. fat, protein, fiber, etc.) in each sample within a matter of a few minutes instead of days as is now the case. This will reduce the time required for analyzing each sample, and this device uses no chemicals which will allow us to reduce the amount of hazardous chemicals purchased, stored, and the chemical exposure to personnel.

Teams have been set up in the division to allow for cross training of personnel, to minimize communication errors, and decrease turn around time for results to be available to our customers.

The following is a breakdown of sample analyses performed in the various programs by the Chemistry Laboratory Division for the year 1996 and 1997.

	1996	1997
Federal/State Meat	1,227	793
State Meat	1,361	1,390
Montana Meat Samples	261	105
Dairy Microbiology	28,279	28,031
Fertilizer	890	754
Feed	933	885
Pesticide Formulation	33	3
Pesticide Residue	224	101
Special Samples	25	45
State Groundwater	4,800	5,000
Pesticide Residue in Milk	0	1,694
TOTAL	38,003	38,801

In addition to the above analytical work, a total of 470 analyses were performed on various check sample programs. The check sample programs are essential for maintaining the quality control, quality assurance, and accuracy of results.

Plant Industry

G. Richard Wilson
Director

Entomological Activities

The Utah Department of Agriculture and Food currently administers nine insect and plant quarantines which require inspection and enforcement by the state entomologist. Effective enforcement, demands cooperation with federal agencies and regulatory officials of other states and countries. Quarantines currently in effect are for European Corn Borer, Gypsy Moth, Apple Maggot, Plum Curculio, Cereal Leaf Beetle, Pine Shoot Beetle, Japanese Beetle, Mint Wilt and Karnal bunt. Karnal bunt was added as an emergency order on March 28, 1996.

During 1997, there were approximately 740 State and Federal Phytosanitary Certificates issued under the direction of the state entomologist. These certificates allow Utah agriculture to ship plants and plant products to other states and foreign countries. The state entomologist also responded to more than 400 public requests for professional advice and assistance. Such assistance includes insect identification, news releases, control recommendations and participation in various education meetings and workshops.

The state entomologist administers the Utah Bee Inspection Act (Title 4, Chapter 11), the Insect Infestation Emergency Control Act, and various entomological services under authority of Title 4, Chapter 2. Major functions performed during 1997 are summarized below:

Apple Maggot

The Apple Maggot survey and detection program in Utah requires the efforts of the State Entomologist, one full time program supervisor, two field scouts and necessary secretarial help. The program was implemented to provide for our continued participation in export markets. In 1997 15,000 traps were used in the adult survey. Since the programs' beginning in 1985 141,128 trees (approximately 15,681 trees removed per year) have been removed from uncared for and abandoned orchards and approximately 700 property owners are contacted annually on orchard spray management techniques.

Bee Inspection

The Utah Bee Inspection Act provides for inspection of all apiaries annually in order to detect and prevent the spread of infectious bee diseases. Without a thorough inspection program, highly contagious diseases could spread rapidly, resulting in serious losses to the bee industry in Utah with corresponding losses to fruit and seed crop producers who are dependant on bees for pollination. During 1997, 35,000 colonies of bees were inspected with the incidence of disease below 3.5 percent.

African Honey Bee

A survey and detection program for African Honey Bee in cooperation with USDA APHIS has been in effect for the southern border areas of Utah since 1994. Early detection supported with information and education will be a major defense mechanism against this devastating and alarming insect.

Cereal Leaf Beetle

Cereal Leaf Beetle was discovered in Morgan County in 1984. It has since been found in fourteen counties of northern Utah. Because Cereal Leaf Beetle can cause a reduction in small grain production up to 75 percent, and domestic grain markets require insect free shipments, the Utah Department of Agriculture and Food in cooperation with Utah State University conducts an annual survey and detection program for this insect. A cooperative insectary program is also underway for this insect in Cache and Davis Counties.

Gypsy Moth

Gypsy Moths were first found in Salt Lake City in the summer of 1988. Since that time the Utah Department of Agriculture and Food has been the lead agency in the administration of a major bio-control program that has had a 95% success rate. Moth catches have been reduced from 2,274 in 1989 to 47 in 1997. The major benefits of this program are:

1. Cost effectiveness
2. Public nuisance reduction
3. Forest and natural resource protection
4. Watershed protection.

Eradication efforts still show significant progress. A treatment program for Knudsens Corner and Wasatch Resort area of Salt Lake County was completed in 1998. Trapping programs will remain vigorous.

Cricket/Grasshopper

Because of the success with control programs for rangeland insects during 1989-97, the Utah Department of Agriculture and food was able to avoid all major insect control programs on rangeland during 1997, including Mormon Cricket.

The 1997 Fall Rangeland Insect Survey was completed the last week of August. Information from this survey has indicated that we may have 19,000 acres infested with grasshoppers in 1998, and possibly 4,000 acres infested with Mormon Crickets.

Fertilizer Program

Administration of the Utah Commercial Fertilizer Act (Title 4, Chapter 13). The program regulates the registration, distribution, sale, use, storage of fertilizer products. It regulates, and license fertilizer blenders and monitors the applicators who spray or apply fertilizer and take samples for analysis.

Unwanted Pesticide Disposal Program

Year	Participants	Disposal Amount/lbs
1993	27	11,453
1994	36	17,487
1995	31	14,095
1996	27	12,334
1997	34	19,903
Total To Date		75,272 pounds

First Year -- Tart Cherry Market Order	
Number individual participants in Cherry Diversion	26
Number of packing plants in Plant Cherry Diversion	3
Total pounds of tart cherries diverted	1,782,620
Departments participation	315 hours

Pesticide Product Registration Program

Pesticide Activities for 1997

1. EMERGENCY USE PERMITS (Section 18).

1993	3
1994	4
1995	2
1996	1
1997	1

2. SPECIAL LOCAL NEEDS (SLN).
   7 SLN labels filed in 1997.

3. EXPERIMENTAL USE PERMIT (EUP)
   1997 3

Pesticide Product Registration

1. Number of pesticide manufacturers or registrants	723
2. Number of pesticide products registered	8,011
3. Number of new products registered as a results of investigation	53
4. Number of violations of the Pesticide Act violation of old products not wanting to register for current year.	12
5. Number of product registration request by field representatives	196

Pesticide Program

The Utah Department of Agriculture and Food administers the Utah Pesticide Control Act which regulates the registration and use of pesticides in Utah. This Act authorizes pesticide registration requirements and the pesticide applicator certification program. The UDAF is also the lead state agency for pesticide use enforcement under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The UDAF administers sections of FIFRA under which programs are developed and implemented by cooperative grant agreements with the Environmental Protection Agency (EPA). These programs include the Worker Protection Program, Endangered Species Program, Ground Water/Pesticide Protection Program, Certification Program, and Pesticide Use Enforcement.

Worker Protection Program

This program provides general training, worker and handler pesticide safety training, "train the trainer" program, training verification, outreach and communication efforts, reporting and tracking, and performance review actions. The UDAF has adopted the national Worker Protection Standards (WPS) Verification Program and distributes WPS Worker and Handler Verification cards to qualified WPS trainers.

Endangered Species Pesticide Program

The EPA's Office of Pesticide Programs provides for individual states to develop an Endangered Species Pesticide Plan. Utah's Threatened and Endangered Species/Pesticide Plan allows the state to provide protection for federally listed species from pesticide exposure while tailoring program requirements to local conditions and the needs of pesticide users. Utah's plan focuses on the use of pesticides as they relate to the protection of threatened and endangered species on private agricultural land and lands owned and managed by state agencies. The UDAF is the lead state authority responsible for administering the plan. Through an interagency review committee, special use permits or landowner agreements can be established to allow for the continued use of certain restricted pesticides for those locations that contain threatened and endangered species or their habitats.

Ground Water/Pesticide Protection Program

The EPA is working with the UDAF to establish a Ground Water State Management Plan as a new regulatory mechanism under FIFRA to prevent pesticide contamination of the nation's ground water resources. The Utah Ground Water/Pesticide State Management Plan is a state program that has been developed through cooperative efforts of the UDAF with various federal, state, and local resource agencies. The plan includes an assessment of risks posed to the state's ground water by a pesticide and a description of specific actions the state will take to protect ground water resources from potentially harmful effects of pesticides.

Certification Program

The UDAF has entered into a cooperative agreement with EPA to undertake the following as part of the department's pesticide certification program: maintaining state certification programs, state coordination with Utah State University Extension Service, state evaluation and participation in training programs, conduct certification activities, maintain records for certified pesticide applicators, and monitor certification program efforts. The department develops and prepares pesticide applicator certification manuals and examinations as part of the licensing requirements of the state.

Pesticide Use Enforcement

The UDAF enforcement activities include the following: cancellation and suspension of pesticide products, general compliance monitoring, tracking, sample collection and analysis, enforcement response policy, ground water and endangered species pesticide enforcement activities, and FIFRA section 19 (f) enforcement actions.

Pesticide Activity

1. No. of inspections of pesticides sales establishments	100
2. No. of physical pesticide samples collected	26
3. No. of investigations of pesticide uses	130
4. No. of violations	26
5. No. of pesticide applicator training sessions	23
6. No. of applicators certified Commercial, Non-Commercial, Private	5,246
7. No. of Pesticide dealers licensed	88

Seed Inspection and Testing

Administration of the Utah Seed Act (Title 4, Chapter 16) involves the inspection and testing of seeds offered for sale in Utah. Work performed in FY 1996-1997 is summarized below:

1.	Number of seed samples tested	2,035
2.	Number of violations determined	88

Seed Testing and Seed Law Enforcement

1. The seed analysts and seed laboratory technician conduct tests on seed samples submitted by agricultural inspectors, seed companies, and other interested parties. Most common tests include percent germinations, purity, and presence of noxious weeds, although a number of other tests are performed upon request.
2. Inspectors monitor the seed trade by collecting representative samples for testing and by checking for proper labeling of all seed offered for sale and for the presence of noxious weeds and other undesirable factors.

Noxious Weed Control Program

In administering the Utah Noxious Weed Control act (Title 4, Chapter 17), the State Weed Specialist coordinates and monitors Weed Control Programs throughout the State.

Approximately 1,206 visits and inspections were made by the thirteen agricultural field representatives located throughout the state. This includes visits and or direct contact with the agencies listed below:

1. Retail Establishments
2. Weed Supervisors and other County Officials
3. State Agencies
4. Federal Agencies
5. Utility Companies
6. Private Landowners
7. Hay and Straw Certification

Control of Noxious Weeds

1. The Division Weed Specialist coordinates weed control activities among the county weed organizations and the agricultural field representatives.
2. Surveys of serious weed infestations are conducted and control programs are developed through the county weed supervisors, county weed boards, and various landowning agencies.
3. The weed specialist and the inspectors work continually with extension and research personnel in encouraging the use of the most effective methods to control the more serious weeds.
4. Noxious Weed Free Hay Certificates
   Activities in Hay and Straw Certification
   a. Inspections in 24 counties.
   b. Inspections for 104 producers.
   c. Approximately 135,000+ bales inspected.
   d. Number of Inspections 138

Commercial Feed Program

Administration of the Utah Commercial Feed Act, (Title 4, Chapter 12) involves inspection, registration, and sampling of commercial feed products. Activities performed in this program in 1997 are summarized below:

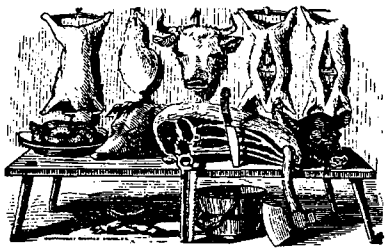
1.	Number of feed manufacturers or registrants contacted	540
2.	Number of feed products registered	5,858
3.	Number of analysis requested of chem lab	885
4.	Number of feed samples collected and tested	451
5.	Number of violations	52

Grain Inspection

Grain inspection services are provided under authority of Title 4, Chapter 2, Section 2, and under designated authority by the Federal Grain Inspection Service. Following is a summary of work performed during the past fiscal year under dedicated credit provisions, with expenses paid by revenue received for grading services:

1.	Number of samples	17,241
2.	Number of miscellaneous tests conducted:	24,347
3.	Total number of activities performed:	1,588

NOTE: Volume of work is influenced each year by a number of factors, among which are weather conditions, governmental crop programs, and marketing situations.



Regulatory Services

Kyle R. Stephens
Director

Mission

The mission of the Food Program is to ensure:

- Foods are safe, wholesome, and sanitary
- Food products are honestly, accurately, and informatively represented
- These products are in compliance with Utah's laws and regulations
- Noncompliance is identified and corrected
- Unsafe or unlawful products are removed from the market

Utah's coordinated approach to assessing food safety consists of prioritization and risk reduction. To be effective in the arena of a constantly evolving food industry we focus on critical issues and maximize our efforts on high risk facilities.

INSPECTIONS 1997

ESTABLISHMENT TYPE	NUMBER	INSPECTIONS
Bakeries	341	641
Grain Processors	11	17
Grocery Stores	1,106	1,725
Meat Departments	316	593
Food Processors	362	589
Warehouses	276	324
Water Facilities	20	36
TOTAL	**2,432**	**3,925**

Food Program

Enhancing Utah's food safety programs are a top priority for the Utah Department of Agriculture and Food. Effective March 18,1998, a new Food Protection Rule will be adopted. The rule contains state-of-the-art food safety practices and provides construction requirements for new and remodeled food establishments. The adoption of this rule will promote uniformity for industry, and consistency/standardization between FDA, states, and local health departments involving both interstate and intrastate commerce. Utah adopted this up-to-date version of the 1997 FDA Model Food Code because it reflects input from industry and other regulatory agencies ensuring Utah products can move freely in commerce around the world.

Significant changes in the proposed rule include: New requirements for food establishment employees to demonstrate food safety knowledge as it pertains to their operation. New cooking times and temperatures. A new refrigeration temperature of 41°F or below. New cooling rates for hot foods. New requirements for food employees to report information about their health that will allow the person in charge to prevent the likelihood of a foodborne disease transmission. Requires the implementation of Hazard Analysis Critical Control Point or HACCP in certain food processors contains a special requirement section for specialized food operations, mobile vendors, and for distressed or salvaged food.

The total number of food inspections conducted by the UDAF's compliance officers grew by 8 percent from last year.

In order to protect the consumer, food that is suspected of being misbranded or adulterated is prevented from moving in commerce. This is achieved through Voluntary Hold Orders and Releases. In 1997, 11 hold orders involving 8,956 pounds of food and four hold order releases involving 4,171 pounds of food were issued. During 1997, there was 6,186 pounds of food voluntarily destroyed because it was suspected of adulteration.

When voluntary compliance cannot be achieved, we take additional regulatory action in the form of Warning Notices and Administrative Action. In 1997, we sent out 43 Warning Notices concerning non-compliance with the Utah Wholesome Food Act (UFA) and the Utah Food Establishment Sanitation Rule (FSR). We issued one Notice of Violation and one Administrative Order was written to ensure compliance.

This year there was an interesting case where Plant Industry and the Division of Regulatory Services worked together to ensure produce that may have been adulterated did not enter the market. A farmer had used an illegal method in the application of the pesticide on potatoes. The potatoes were tested at harvest and found to be free of the pesticide.

Training

Implementing the first major revision of the Food Rule in twelve years is a challenge. The key to a successful implementation is education and communication. The compliance officers are being trained and standardized on the new Food Protection Rule (FPR). We have been in the process of addressing the new requirements of the FPR over the past year by ensuring companies requiring Hazard Analysis Critical Control Point or HACCP have been identified. The food safety system is moving to one of prevention by identifying points in the process where hazards may exist and constantly monitoring these points so if a problem occurs it can be immediately identified and corrected instead of waiting to test the finished product. This system has world-wide recognition and acceptance.

Egg & Poultry Grading Program

The Egg & Poultry Grading Program provides needed services to the egg and poultry industry and the consumers of Utah. Eggs are a valuable food produced for the consumer, are highly nutritious, and are an important part of our diet.

Eggs are a potentially hazardous product and require special processing and handling.

The various program activities include:

Shell Egg Grading	Retail Egg Grading
Fee Grading	Shell Egg Surveillance
Egg Products Inspection	Poultry Grading
USDA Destination Poultry Grading *(School Lunch Program)*	

Shell eggs are inspected at both wholesale and retail establishments for wholesomeness, grade and size. Grading standards have been established that allow the sale of eggs. The Utah Shell Egg Law provides authority for checking the eggs to meet these standards. Utah adopts USDA Egg, Egg Product and Poultry Standards. Grading standards must be followed because approximately ten percent of nest run eggs fall in the restricted category C that is: checks, leakers, loss and dirties. Without egg grading, the percentage of restricted eggs in the carton increase and eggs would not meet standards established to protect consumers.

USDA egg grading is a program made available by the U. S. Department of Agriculture to egg plants who want their eggs to bear the USDA grade shield. This grading service is provided on a voluntary basis to those who request it and pay for such services. We administer this service using licensed department employees, USDA standards, regulations and supervision. The use of the official USDA grade shield certifies that the eggs have been graded under continuous inspection for quality and size.

In calendar year 1997, there were 138,264 cases (30 dozen eggs per case) of eggs graded in the State of Utah. Of these, 543 cases were embargoed due to excess restricted eggs or being below USDA standards. The low percentage of embargoed eggs on the retail level indicates the high degree of compliance to the Shell Egg Law in the marketplace.

The Egg Products Inspection Act outlines the requirements for egg handlers and producers. Utah currently has one egg breaking plant which is under continuous inspection. Egg breaking plants are inspected to see that eggs are properly received, refrigerated, washed, candled, sanitized, properly broken, pasteurized, formulated and packaged under the safe, clean, sanitary conditions that meet USDA standards and regulations. Egg products include dried, liquid and frozen eggs. Egg products are used extensively in the food industry in the production of bakery items, pasta products, ice cream, egg nog, etc. and is used by restaurants and institutions in meals.

In 1997, there were 56,624 cases of eggs broken and pasteurized.

The Shell Egg Surveillance Program requires egg producers and handlers to be registered with USDA and licensed personnel conduct quarterly visits. The primary purpose of these inspections is to survey compliance to the Federal Egg Products Inspection Act. The law covers the handling and disposition of restricted eggs - checks, leakers, loss eggs (such as bloods and rots), inedible eggs and dirties. Leakers, loss and inedible eggs must be denatured, destroyed or diverted to animal feed.

Poultry grading involves the Utah turkey industry, which is a major turkey producing state. Poultry grading is a voluntary program paid for by industry. Grading on whole birds and parts provide consumers with products meeting USDA quality standards. Poultry grading also involves destination grading for poultry used in federal food programs, such as school lunch, military and export activities.

There are two turkey plants in Utah located at Moroni and Salina. Both plants have expanded facilities for increased value-added processing of turkey products. This expansion will increase the production of both plants and increase grading activities.

In 1997, the graders at Moroni and Salina were responsible for grading 112,411,311 pounds of live turkeys. Production in 1998 is projected to see a slight decrease.

Some changes took place in 1997 in the Egg & Poultry Program. The major problem was the S.E. incident. Zeeman Poultry has diverted their production to Bud Shepherd and Sons plant. Howlett's eliminated one coop of chickens and will probably not replace them.

The Utah egg industry, state and federal agencies signed the Utah Egg Quality Assurance Plan in March of 1998.

Dairy Compliance Program

The primary goal of the Dairy Compliance program is to provide effective public health control throughout the production, handling, pasteurization, and distribution of milk and milk products in order to facilitate the shipment and acceptance of high quality milk and milk products.

Utah continues to see the number of permitted dairy producers decline, due to the volatile economic situation in the dairy industry during the past year. High feed prices, low return for culled animals, high cost of replacements, and continued lower milk prices, all contributed to the decline. The total number of permits declined 10 percent during 1997, compared to 4 percent in 1996. More importantly, the number of permitted dairies has declined by 30 percent over the past five years. We are currently providing inspection to 413 Grade A producers compared to 441 at this time last year. The number of Manufacturing Grade producers dropped to 113 from 125 in 1996. The number of processing facilities increased from 42 to 44.

The Dairy Compliance Program continues to seek voluntary compliance whenever possible. However, when voluntary compliance cannot be achieved, regulatory action is initiated. In all, 2,356 inspections were conducted; 117 permits were suspended; three administrative hearings were held; and 2.1 million pounds of adulterated and misbranded product was removed from commerce by Utah compliance officers.

We are continuing our partnership agreement with FDA. This cooperative program is based on inspection activities of our staff of non-IMS processors in Utah, (those processors not under the direction of the Interstate Milk Shippers Conference). As provided in the agreement FDA accepts our inspections in lieu of FDA performing the inspections, eliminating costly duplication. We conducted approximately 160 inspections during 1997 and provided the information to FDA for their review.

A new mega co-op should begin doing business in Utah sometime after the first part of 1998. Dairy Farmer of America Inc.'s (DFA) leaders say the new co-op should open pending final review of the Department of Justice antitrust division. The nation wide dairy marketing co-op serves 22,000 members in 42 states and produces 21percent of the U.S. milk supply. DFA is

the result of a consolidation of Western Dairymen Cooperative (WDCI) headquartered in Salt Lake City, Associated Milk Producers (AMPI), Mid-America Dairymen (Mid-Am), and Milk Marketing Inc. (MMI).

On May 20, 1997, USDA proposed to change the system for how fluid milk is priced and marketed. The major change would be consolidating the current 32 federal milk marketing orders into 11 orders. USDA has issued three reform proposals, none of which has met with much enthusiasm among dairy industry. To make matters worse, the Minnesota Milk Producers filed suit in U.S. District Court challenging whether Class I differentials could be enforced. Judge David Doty ruled against using existing Class I differentials to price milk. The ruling sent shock waves through the dairy industry. No doubt many in the dairy industry sighed in relief when Judge Doty stayed his earlier order for 90 days. Utah producers would have lost income if the order prevailed.

Meat Compliance Program

The Meat Compliance Program goal is to control and limit the movement in commerce of adulterated or misbranded meats. An additional goal is to provide accurate information concerning complex meat laws to all those involved in the meat business.

Meat-related businesses are adjusting well to the implementation of HACCP (Hazard Analysis and Critical Control Points). All Utah meat plants are now operating under Standard Sanitary Operating Procedures, (SSOPs). We expect an adjustment time for meat and poultry plants to become accustomed to the responsibility of managing the sanitation in their plants. Large plants are required to have full HACCP programs in place by the end of January 1998. The meat industry has been generally supportive of the change and are anxious to provide a safe and well labeled product to the consumer. The mind set of inspection and compliance personnel must change from a "command and control position", to "industry controlled" sanitation programs. Failure of compliance and inspection to change will cause confusion and fail to provide expected results and service to the consumer.

In an effort to help small meat plants comply with sampling requirements under the HACCP regulation, we have purchased state-of-the-art technology. The Mini-Vidas was tested in 1995 as a joint study with Brigham Young University. Favorable study results convinced UDAF of its usefulness and late in June 1997, the equipment was purchased. The Mini-Vidas has the capability of testing many foods of various textures and consistencies for pathogens. We hope to have this technology available for use early in 1998. The equipment will be used to test apple juice, milk, milk products and meat. We plan on using the equipment as part of the verification process in the Seafood HACCP regulation. This technology will allow the Utah Department of Agriculture and Food to respond to consumer needs and expectations.

The Meat Compliance program is also responsible for the implementation of the "Seafood Hazard Analysis Critical Control Point Rule". Federal Law requires implementation by December 18, 1997. Most of the seafood processors in Utah were prepared for the change and implementation was easily achieved. We are currently working with several seafood handlers to bring their operation into full compliance. The new regulation does not apply to retail stores that sell to the ultimate consumer or to fee fishing ponds which minimally process fish for patrons. Encompassed by the Seafood Rule is the Interstate Shellfish Sanitation Conference which regulates harvest to consumption of raw shellfish. We participate in this program and have stepped up our compliance activities at all shellfish outlets.

During the calender year 1997, the Meat Compliance Program conducted 1,490 random reviews of state businesses and 39 planned compliance reviews of previous violators of meat laws. In addition, 43,000 pounds of adulterated or misbranded meats were embargoed or destroyed. Compliance investigations resulted in 13 letters of warning being issued and three informal administrative hearings with fines of $4,750. Compliance officers collected more than 400 ground beef samples. The State Chemist tested the samples for fat, sulfites, and added water. The results showed a high degree of compliance.

Bedding, Upholstered Furniturre and Quilted Clothing Program

The purpose of the Bedding, Upholstered Furniture and Quilted Clothing Program is to protect consumers against fraud and product misrepresentation, to assure Utahns receive hygienically clean products and to provide allergy awareness when purchasing these articles. Utah law requires manufacturers, supply dealers, and wholesalers of these products, and components used to make or repair such products, to obtain an annual license from the Department of Agriculture and Food for their particular type of business before offering products for sale within the state. This law does not apply to isolated sales of such articles by persons who are not primarily engaged in the making, processing, or repair of these articles.

Product labels are required to list the enclosed fibers and their percentages. This enables consumers to make price/value/performance-based buying decisions.

The Department works with industry representatives and with regulatory officials from other states to establish uniformity in nomenclature, labeling, and standards for these products. License fees fund an inspection program which allows products to be tested to ensure contents are accurately labeled. During 1997, 1,310 licenses generated $69,000 in general revenue, making the program self-sustaining.

Food Labeling Program

The State of Utah has adopted labeling regulations as set forth in the Code of Federal Regulations (CFR) and reviews labels to assist manufactures to comply with these regulations. This avoids costly reprinting in the case of labeling violations, and helps assure that consumers get complete and accurate information in a uniform format on all products. Many labels are voluntarily submitted by manufacturers; other reviews are generated by complaints or random inspections.

Proper labeling of food ingredients is a vitally important issue to consumers who have food sensitivities or other dietary restrictions. One focus of inspections conducted at store level, is educating employees on the need to correctly and consistently label foods before they are offered for sale. Reports of increasing numbers of allergic reactions to incomplete or incorrectly labeled foods has caused the Food and Drug Administration

(FDA) to consider whether or not to clarify its regulations to ensure that even insignificant amounts of the most commonly known allergens are disclosed on product labels.

During 1997, revisions of the CFR have changed labeling requirements for lower-fat milk products which now must follow the same criteria as most other foods labeled "low fat". Only products containing 3 grams or less total fat per serving can be designated as "low fat". Products formerly labeled 2 percent Milkfat, Low-fat Milk contain about 5 grams of fat per serving and, therefore, can no longer be called "Low-fat". They can be called "Reduced Fat" instead, because they represent at least a 25% reduction in fat content compared to "Whole Milk" which contains about 8 grams of fat per serving.

In 1997, FDA published final dietary supplement rules requiring labeling changes for those products also. The new rules require labels to include the words "Dietary Supplement" as part of the product name and to carry a "Supplement Facts" panel similar to the "Nutrition Facts" panels that appear on most processed foods. The rules also set parameters for use of the terms "high potency" and "antioxidant". Reference daily intakes (RDI's) for vitamin K, selenium, manganese, chromium, molybdenum and chloride have also been established.

Another significant change is the requirement that as of January 1, 1998, all enriched breads, flours, corn meals, pastas, rice and other grain products are required to be enriched with folic acid in addition to the previously required enrichments - thiamin, riboflavin, niacin and iron. Studies indicate that folic acid consumed in adequate amounts by women before and during early pregnancy reduces the risk of such birth defects as spina bifida and other neural tube disorders. FDA believes that folic acid fortification of cereals, grains, and bakery products is one a safe scientific approach to protect the future health of children.

Label laws and rules continue to change as new technology creates new products. Correct and complete food labels help to protect consumers and contribute to a safe and healthful food source for all of us. However, consumers are still ultimately responsible to read and understand the label and make choices based on their personal needs.

Weights and Measures Program

The weights and measures program involves all weights and measures of every kind, and any instrument or device used in weighing or measuring together with any appliance or accessory associated with such instrument. The purpose of the program is to ensure that equity prevails in the market place, and that commodities bought or sold are accurately weighed or measured and properly identified. These activities are enforced through the Utah Weights and Measures Act and five accompanying Administrative Rules.

The Weights & Measures Program operates in the following nine areas:

General Inspections

Our five inspectors checked 6,698 small capacity scales *(0 to 49 lbs.)*, 1,368 medium capacity scales *(50 to 999 lbs.)* and 19,421 gasoline pumps. Every type of item is subject to either a scanning inspection, package checking, or label review. In 1997, there were 5,793 random packages checked, which represents a total of over 102,286 packages.

Large Capacity Scales

There are three (3) inspectors involved in testing large capacity scales *(1000 lbs. and up)*. These devices may include scales used for weighing livestock, coal, gravel, vehicles, etc., with inspections conducted at auction yards, ranches, ports of entry, mine sites, construction sites, gravel pits and railroad yards, etc. A total of 1,354 large capacity scale inspections were conducted in 1997. **L P Gas Meters** With the addition of a new trailer and a newly trained inspector, this program was put back into service. There were 348 meters tested in 1997. **Large Capacity Petroleum and Water Meters** Inspections are conducted on airport fuel trucks, all fuel delivery trucks, cement batch plant water meters and other large meters. There were 264 inspections conducted in 1997. **Metrology Laboratory** The metrology lab houses the primary weight, length and volume standards for the State of Utah. During 1997, we purchased a new 500 KG mass comparitor to be more efficient and accurate.

During 1997, we sent our primary mass standards and volume standards back to NIST to be re-certified. We also sent the metrologist to the U.S. Combined Regional Meeting in San Antonio, Texas for training. The State Metrologist continues to work toward full accreditation by the National Institute of Standards and Technology. **Motor Fuel Laboratory** During 1997, another new portable octane analyzer was purchased. We contracted for a special trainer from Waukesha Engine Division to provide training on the knock engines.

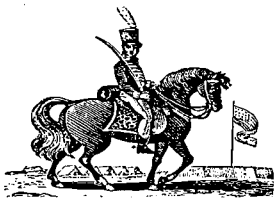
From 1993 to 1996, we have seen an increase of about 31% in small and medium devices and 42 % increase in gasoline dispensing devices. This increase is due primarily to industry and population growth.

As population and industry growth continues, so does the need for business and associated industry. Along with that comes the increased need to provide weights and measures inspection service to those affected. We purchased a laptop computer and inspection software that was field tested during 1997. Our goal is to be successful in increasing our productivity without adding additional personnel, while at the same time meeting the demands of a growing program.

Administrative Hearings Program

The administrative hearings program of the UDAF is assigned to this division. During 1997, we conducted 22 informal hearings. Administrative Orders were issued on 20 of the cases and two were settled prior to hearing. The orders and settlement agreements resulted in $23,835 in civil penalties and up to five years probation.

The administrative procedures process of the department is an effective tool in gaining compliance without going through the lengthy judicial process.



Utah Horse Industry

Horses have always played an important role in the economy of Utah and the United States. The following information is a summary of a 1994 report on Utah's horse populations compiled by E. Bruce Godfrey, professor of economics at Utah State University. The information was collected from a questionnaire distributed to 2,500 residents.

Early in the history of Utah horses and other equine were a major source of power and beasts of burden.

Horse populations on farms in the United States have steadily declined in the years from 1930 to 1960. Since then, horse ownership apparently has increased especially among non-farmers, although few data are available concerning horse ownership by non-farmers.

Most horse owners are located along the Wasatch Front where most of Utah's population is located. More than 60 percent of the horses are owned by people who live in Salt Lake, Utah, Weber, Davis, Cache, and Box Elder Counties. The large number of households in the urban counties resulted in a concentration of horse numbers in these counties, even though the number of horses owned per household was smaller in urban than rural counties.

Income and Profession

Households who own horses in Utah had relatively high incomes. The percentage of horse owners with low incomes (less than $20,000) was smaller than the general population, and the percentage of people in the upper income groups (above $50,000) was higher than the general population.

More than 40 percent of the respondents were college graduates. Seventeen percent have an advanced college degree.

Horse owners in Utah are apparently one family-or-urban-oriented. Nearly two-thirds of respondents to the survey indicated they were a "family pleasure horse" operation.

Most horse owners in Utah keep their animals on lands they own. Only 25 percent kept their animals on someone else's property. Most of the "farms and ranches" were not large.

While most owners were fairly young, 71 percent of respondents stated they owned horses for more than ten years.

While families own the largest portion of horses in Utah, commercial operations own a greater number per unit.

Economic Importance

Since most horses in Utah are kept for pleasure-use, their individual economic impact is quite small. Yet the revenue from associated services is measured in the millions of dollars.

Horse owners spend more than $775 per year in feed, medical bills, boarding, and other needs in order to maintain their animals. This generates an estimated $156 million on Utah's herd of 182,700 horses. Other capital costs for barns, corrals and tack are estimated at more than $560 million dollars.

Owners placed an average value on their animals at $1,600 each, for an aggregate value of nearly $293 million statewide.

Numbers of Animals

Horses were located in every area and county of the state, but the number of animals has changed over time. There were about 133,000 head in 1975. Since then, the population in Utah has increased by about a half million people, and a larger portion of Utahns live in the urban counties along the Wasatch Front. This change in population may or may not have altered horse numbers in Utah.

Responses to the questionnaire indicated that 8.7 percent of the households had equine (horses, mules and donkeys), which would represent about 48,100 households (552,500 households times 8.7 percent) in the state. The average household owned an average of 3.80 equine on Jan. 1, 1992, which would mean that there were approximately 182,700 equine in Utah at the start of 1992.

Horse ownership in the United States probably peaked in the late 1980s. Data from the Utah Department of Agriculture and Food also suggest that the inspection of horses at auction yards peaked in FY 1989-90.

Breeds

Quarter horses dominated the horse population in Utah. Other popular breeds are listed below:

Breed/Type	Grade	Registered	Total	Percent
Quarter Horse	32,400	58,700	91,100	49.78
Arabian	4,800	20,800	25,600	13.99
Paint	7,050	6,350	13,400	7.32
Thoroughbred	900	12,400	13,300	7.27
Appaloosa	4,750	4,200	8,950	4.89
Mules	3,500	0	3,500	1.91

Uses/Interests

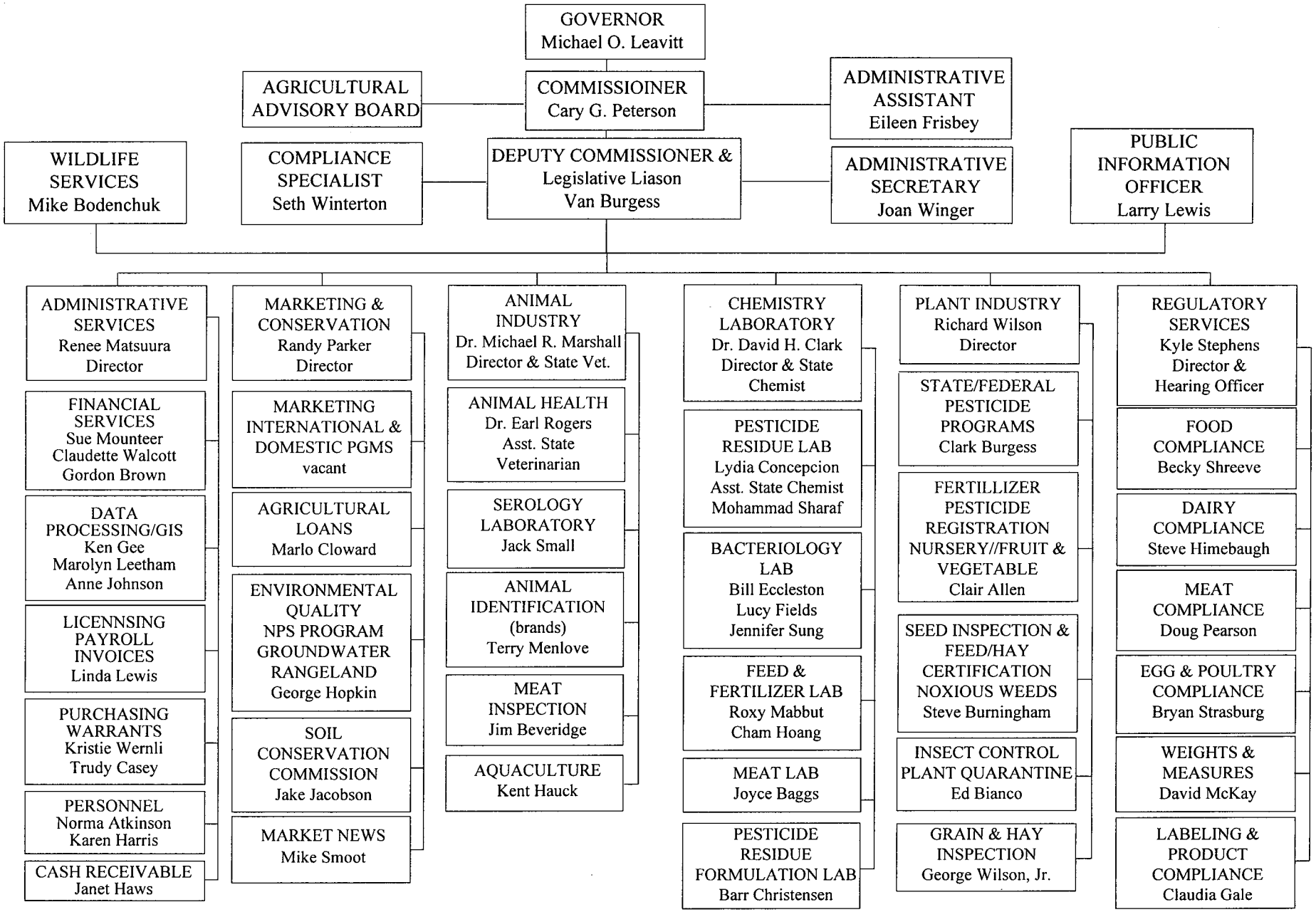
Pleasure riding was clearly the primary interest of horse owners. Pleasure riding, youth activities, and hunting activities that received the highest rankings, are activities that could be considered family related.

Income

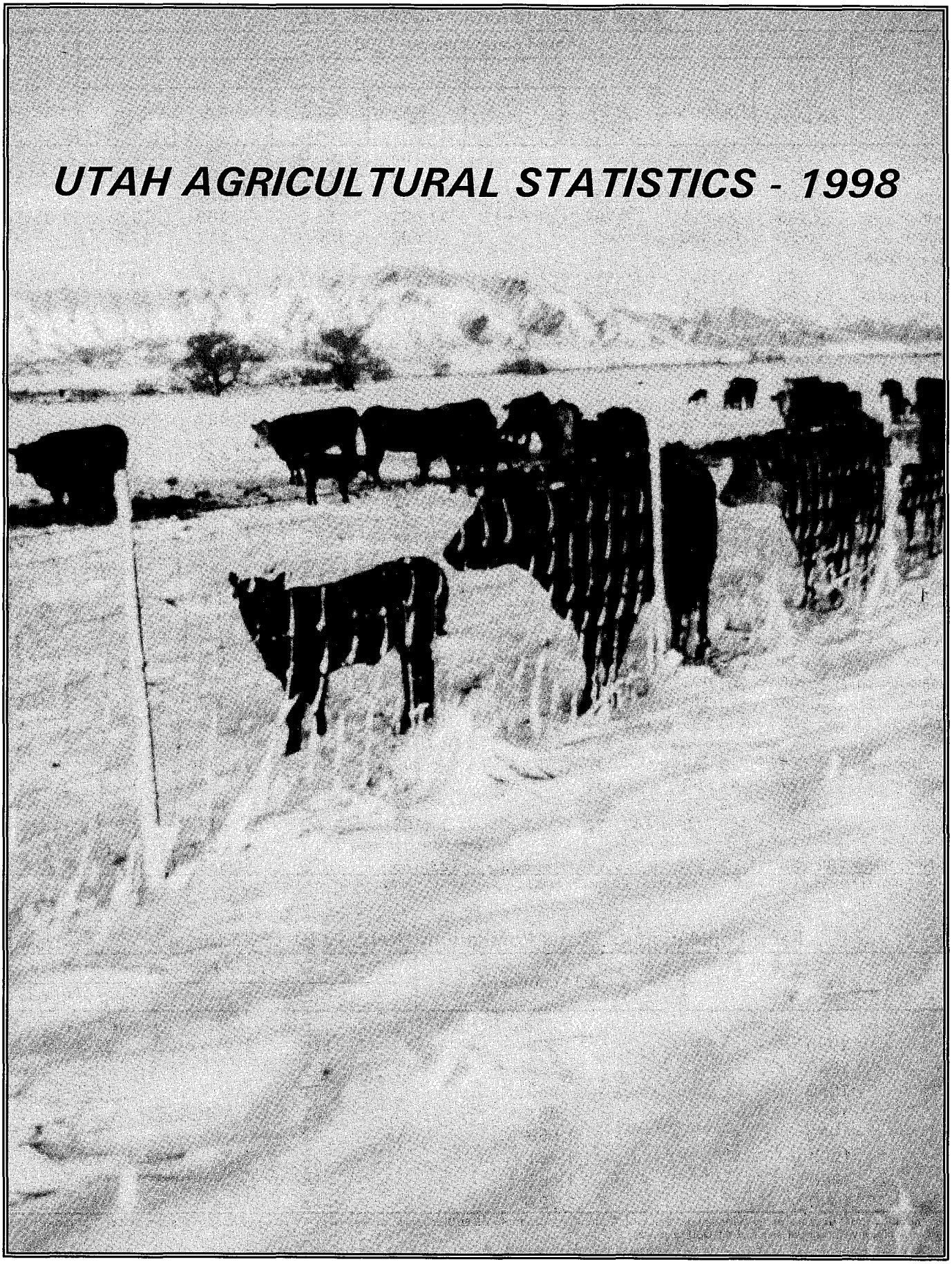
Less than 5 percent of respondents indicated that they received any income from the horses they owned. Thus, horses apparently generated relatively little income, primarily because horses were largely used for pleasure-related activities. The primary group who earned any horse-related income did so from breeding, racing and show-related activities.

One activity that generated income and primarily involved Utah horses was breeding. About 90 percent of the stallions in the state were used for breeding and the average stud fee was just over $400. This yielded an estimated total income of nearly $5 million (for information on horse racing in Utah, see Marketing and Conservation in this annual report).

UTAH DEPARTMENT OF AGRICULTURE AND FOOD
ORGANIZATIONAL CHART



UTAH AGRICULTURAL STATISTICS - 1998



Area & Population of Counties, Utah

County	United States Census - 1990								July 1, 1997 Est. 1/
	Total Land Sq Miles	Total Population	Urban		Rural				
			Total Urban	Percent of Total	Total Rural	Percent of Total	Total Farm	Percent of Total	
Beaver . . .	2,590	4,765	--	--	4,765	100.0	87	1.8	5,742
Box Elder	5,724	36,485	19,852	54.4	16,633	45.6	1,328	3.6	40,235
Cache	1,165	70,183	55,232	78.7	14,951	21.3	1,429	2.0	84,186
Carbon . . .	1,479	20,228	8,727	43.1	11,501	56.9	183	0.9	21,643
Daggett . .	698	690	--	--	690	100.0	119	17.2	753
Davis	305	187,941	186,544	99.3	1,397	0.7	154	0.1	224,307
Duchesne	3,238	12,645	3,915	31.0	8,730	69.0	1,239	9.8	14,402
Emery	4,452	10,332	--	--	10,332	100.0	414	4.0	10,929
Garfield . .	5,175	3,980	--	--	3,980	100.0	142	3.6	4,525
Grand	3,682	6,620	3,971	60.0	2,649	40.0	102	1.5	8,830
Iron	3,299	20,789	13,443	64.7	7,346	35.3	176	0.8	29,338
Juab	3,392	5,817	3,515	60.4	2,302	39.6	193	3.3	7,702
Kane	3,992	5,169	3,148	60.9	2,021	39.1	62	1.2	6,039
Millard . . .	6,590	11,333	2,998	26.5	8,335	73.5	598	5.3	12,068
Morgan . . .	609	5,528	--	--	5,528	100.0	214	3.9	6,875
Piute	758	1,277	--	--	1,277	100.0	84	6.6	1,534
Rich	1,029	1,725	--	--	1,725	100.0	87	5.0	1,788
Salt Lake	737	725,956	721,342	99.4	4,614	0.6	73	2/	830,627
San Juan	7,821	12,621	3,162	25.1	9,459	74.9	45	0.4	13,541
Sanpete . .	1,588	16,259	3,363	20.7	12,896	79.3	380	2.3	20,581
Sevier	1,910	15,431	5,593	36.2	9,838	63.8	225	1.5	18,238
Summit . .	1,871	15,518	4,468	28.8	11,050	71.2	440	2.8	24,675
Tooele . . .	6,946	26,601	18,174	68.3	8,427	31.7	254	1.0	31,997
Uintah . . .	4,477	22,211	9,242	41.6	12,969	58.4	893	4.0	24,637
Utah	1,998	263,590	244,834	92.9	18,756	7.1	1,539	0.6	330,803
Wasatch . .	1,181	10,089	4,782	47.4	5,307	52.6	183	1.8	12,925
Washington	2,427	48,560	35,898	73.9	12,662	26.1	89	0.2	76,348
Wayne . . .	2,461	2,177	--	--	2,177	100.0	146	6.7	2,440
Weber . . .	576	158,330	147,172	93.0	11,158	7.0	807	0.5	181,045
State Total	82,168	1,722,850	1,499,375	87.0	223,475	13.0	11,685	0.7	2,048,753

1/ State Office of Planning and Budget, State of Utah. 2/ Less than 0.1 percent of total county population.

Farm Population vs. Total Population, Utah, 1930-1990 Census

Year	Total Population	Farm Population	
		Number	Percent of Total
	1,000		Percent
1930	508	116	22.8
1940	550	105	19.1
1950	689	81	11.8
1960	891	65	7.3
1970	1,059	38	3.6
1980 1/	1,461	24	1.7
1980 2/	1,461	18	1.3
1990 2/	1,723	12	0.7

1/ Farm definition: 10 or more acres with annual sales of Agricultural products of $50 or more; or less than 10 acres with annual sales of $250 or more. 2/ Farm definition: A place with annual sales of $1,000 or more.

Ranking: Utah's Rank and United States Total, Top Six States, by Agricultural Category

Top Six States						Utah's Rank	United States Total
First	Second	Third	Fourth	Fifth	Sixth		
GENERAL							
NUMBER OF FARMS & RANCHES, 1997							
TX	MO	IA	KY	MN	CA	36	
205,000	102,000	98,000	88,000	87,000	84,000	13,400	2,057,910
LAND IN FARMS & RANCHES, 1997 (1,000 Acres)							
TX	MT	KS	NE	SD	NM	28	
129,000	59,600	47,800	47,000	44,000	43,500	11,000	968,338
CASH RECEIPTS FROM FARM MARKETINGS, 1996 (Million Dollars) 1/							
CA	TX	IA	NE	IL	MN	37	
23,310	13,053	12,853	9,454	9,050	8,809	873	202,339
FIELD CROPS							
HARVESTED ACREAGE PRINCIPAL CROPS, 1997 (1,000 Acres) 2/							
IA	IL	KS	ND	MN	TX	36	
24,513	23,534	22,850	21,091	20,079	19,979	1,068	319,894
CORN FOR GRAIN PRODUCTION, 1997 (1,000 Bushels)							
IA	IL	NE	MN	IN	OH	40	
1,656,000	1,425,450	1,151,700	857,850	719,550	462,300	3,105	9,365,574
CORN FOR SILAGE PRODUCTION, 1997 (1,000 Tons)							
WI	CA	NY	PA	MN	MI	24	
10,950	8,190	8,175	7,560	6,525	4,640	1,032	91,903
BARLEY PRODUCTION, 1997 (1,000 Bushels)							
ND	MT	ID	WA	MN	CO	10	
101,250	63,600	60,040	37,240	27,540	10,080	8,170	374,478
OATS PRODUCTION, 1997 (1,000 Bushels)							
WI	ND	MN	IA	SD	PA	30	
20,790	18,000	17,980	17,885	17,050	9,440	666	176,104
ALL WHEAT PRODUCTION, 1997 (1,000 Bushels)							
KS	ND	MT	OK	WA	TX	28	
506,000	267,695	185,630	178,200	168,080	118,900	9,174	2,526,552
OTHER SPRING WHEAT PRODUCTION, 1997 (1,000 Bushels)							
ND	MT	MN	SD	ID	WA	9	
210,000	121,800	76,800	67,200	44,460	24,030	1,334	557,750
WINTER WHEAT PRODUCTION, 1997 (1,000 Bushels)							
KS	OK	WA	TX	CO	NE	27	
506,000	178,200	144,050	118,900	91,200	70,300	7,840	1,882,609
ALL HAY PRODUCTION, 1997 (1,000 Tons)							
TX	CA	SD	MO	KS	NE	24	
10,790	8,616	8,090	7,194	6,840	6,505	2,685	152,120
ALFALFA HAY PRODUCTION, 1997 (1,000 Tons)							
CA	SD	WI	MN	ID	NE	15	
7,056	5,290	4,940	4,868	4,488	4,225	2,344	79,242
ALL DRY EDIBLE BEANS PRODUCTION, 1997 (1,000 Cwt)							
ND	MI	NE	CA	MN	CO	17	
6,890	5,033	3,708	2,970	2,403	2,280	39	29,156
ALL POTATO PRODUCTION, 1997 (1,000 Cwt)							
ID	WA	CO	WI	OR	ND	30	
135,430	88,060	28,037	27,923	27,161	21,525	915	459,912

1/ In accordance with USDA, ERS Ranking of States and Commodities by Cash Receipts, 1995. 2/ Crop acreage included are corn, sorghum, oats, barley, wheat, rice, rye, soybeans, peanuts, sunflowers, cotton, all hay, dry edible beans, potatoes, tobacco, sugarcane, and sugar beets.

Ranking: Utah's Rank and United States Total, Top Six States, by Agricultural Category

Top Six States						Utah's Rank	United States Total
First	Second	Third	Fourth	Fifth	Sixth		
FRUITS & VEGETABLES							
APPLE PRODUCTION, ALL COMMERCIAL, 1997 (1,000 Lbs)							
WA	NY	MI	CA	PA	VA	21	
4,900,000	1,120,000	1,050,000	975,000	475,000	250,000	40,000	10,226,600
APRICOT PRODUCTION, 1997 (1,000 Tons)							
CA	WA					Freeze out	
132	6	--	--	--	--	0	138
PEACH PRODUCTION, FREESTONE, 1997 (1,000 Lbs)							
CA 1/	GA	SC	PA	NJ	MI	19	
739,000	160,000	160,000	75,000	65,000	61,000	7,000	1,503,100
PEAR PRODUCTION, 1997 (1,000 Tons)							
WA	CA	OR	NY	MI	PA	9	
455	312	255	9	4	4	1	1,044
SWEET CHERRY PRODUCTION, 1997 (1,000 Tons)							
WA	OR	CA	MI	ID	MT	9	
92	50	49	27	1	1	1	223
TART CHERRY PRODUCTION, 1997 (1,000 Lbs)							
MI	UT	NY	WI	PA	OR	2	
225,000	17,500	14,500	10,500	6,500	3,200	17,500	288,900
ONION PRODUCTION, SUMMER STORAGE, 1997 (1,000 Cwt)							
CA	OR	WA	ID	CO	NY	8	
12,760	10,770	7,155	5,658	5,355	3,660	1,164	49,575
LIVESTOCK, MINK, & POULTRY							
ALL CATTLE & CALVES, JAN. 1, 1998 (1,000 Head)							
TX	NE	KS	OK	CA	MO	35	
14,300	6,650	6,550	5,450	4,600	4,300	870	99,501
BEEF COWS, JAN. 1, 1998 (1,000 Head)							
TX	MO	OK	NE	SD	MT	28	
5,520	1,990	1,965	1,930	1,559	1,542	340	33,683
BREEDING HOGS, DEC. 1, 1997 (1,000 Head)							
IA	NC	MN	IL	IN	NE	20	
1,350	1,050	620	560	460	440	55	6,979
HONEY PRODUCTION, 1997 (1,000 Lbs)							
CA	ND	FL	SD	MT	MN	24	
30,000	24,500	16,080	15,600	12,840	10,585	1,664	192,393
MINK PELT PRODUCTION, 1996 (Pelts)							
WI	UT	MN	OR	ID	WA	2	
718,100	585,000	293,300	208,000	170,000	117,000	585,000	2,649,100
ALL SHEEP, JAN. 1, 1998 (1,000 Head)							
TX	CA	WY	CO	MT	SD	7	
1,500	870	680	575	410	400	350	7,616
CHICKENS, LAYERS INVENTORY, DEC. 1, 1997 (1,000 Head)							
OH	CA	PA	IN	IA	GA	33	
27,058	26,280	22,605	22,314	21,785	20,520	1,518	311,084
MILK COW INVENTORY, JAN. 1, 1998 (1,000 Head)							
WI	CA	NY	PA	MN	TX	25	
1,380	1,350	700	638	570	380	90	9,191
TROUT SOLD, 1996 (Value 000)							
ID	NC	CA	PA	CO	UT	6	
31,732	6,199	6,040	5,972	2,716	2,325	2,325	77,576

1/ freestone

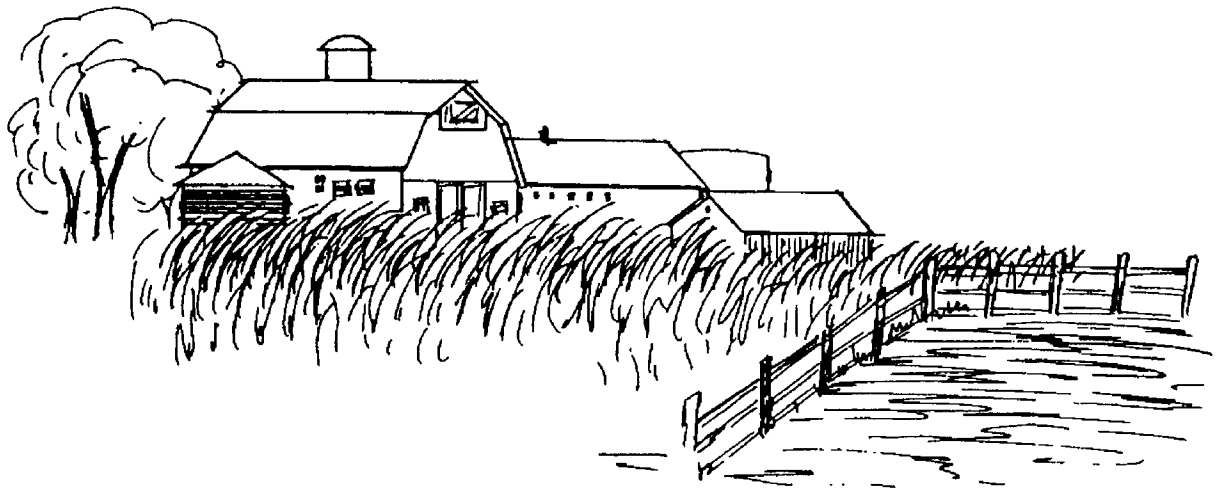
Record Highs and Lows: Acreage, Yield, and Production of Utah Crops

Item	Quantity Unit	Record High		Record Low		Year Record Started
		Quantity	Year	Quantity	Year	
CORN FOR GRAIN						
Acres Harvested	1,000 Acres	24	1918 & 92	2	1963 & 66	1882
Yield	Bushels	140.0	1987,90&91	14.7	1889	
Production	1,000 Bushels	3,240	1992	85	1934	
CORN FOR SILAGE						
Acres Harvested	1,000 Acres	80	1975 & 76	2	1920-22	1919
Yield	Tons	24.0	1997	6.0	1934	
Production	1,000 Tons	1,501	1980	17	1921	
BARLEY						
Acres Harvested	1,000 Acres	190	1957	8	1898	1882
Yield	Bushels	90	1995	22.0	1882	
Production	1,000 Bushels	12,880	1982	242	1882	
OATS						
Acres Harvested	1,000 Acres	82	1910	8	1991 & 94	1882
Yield	Bushels	78.0	1993	25.0	1882 & 83	
Production	1,000 Bushels	3,338	1914	550	1977	
ALL WHEAT						
Acres Harvested	1,000 Acres	444	1953	65	1880 & 81	1879
Yield	Bushels	53.9	1995	15.4	1919	
Production	1,000 Bushels	9,750	1986	1,139	1882	
SPRING WHEAT						
Acres Harvested	1,000 Acres	160	1918	16	1972	1909
Yield	Bushels	75.0	1995	18.7	1919	
Production	1,000 Bushels	4,000	1918	704	1972	
WINTER WHEAT						
Acres Harvested	1,000 Acres	342	1953	120	1909	1909
Yield	Bushels	50.0	1995	12.7	1919	
Production	1,000 Bushels	8,100	1986	1,862	1924	
ALL HAY						
Acres Harvested	1,000 Acres	705	1996	402	1909	1909
Yield	Tons	3.89	1993	1.51	1934	
Production	1,000 Tons	2,685	1997	679	1934	
ALFALFA HAY						
Acres Harvested	1,000 Acres	562	1930	359	1934	1919
Yield	Tons	4.40	1993	1.67	1934	
Production	1,000 Tons	2,344	1995 & 97	600	1934	
OTHER HAY						
Acres Harvested	1,000 Acres	180	1947	92	1934	1924
Yield	Tons	2.20	1993 & 97	0.86	1934	
Production	1,000 Tons	341	1997	79	1934	
DRY EDIBLE BEANS						
Acres Harvested	1,000 Acres	20	1970	0.6	1996	1934
Yield	Pounds	1,600	1996	200	1956,59,62 &77	1954
Production	1,000 Cwt	91	1947	2	1977	1934
FALL POTATOES						
Acres Harvested	1,000 Acres	19.6	1943	4.2	1996	1882
Yield	Cwt	295	1997	45	1886	
Production	1,000 Cwt	2,153	1946	405	1886	
SUMMER STORAGE ONIONS						
Acres Harvested	Acres	2,400	1944 & 97	550	1954 & 66	1939
Yield	Cwt	525	1992	200	1940	
Production	1,000 Cwt	1,164	1997	150	1952	
APPLES						
Utilized Production	Million Lbs	63.0	1987	2.7	1889	1889
APRICOTS						
Utilized Production	Tons	10,000	1957	0	1972, 95 & 97	1929
PEACHES (Freestone)						
Utilized Production	Million Lbs	44.2	1922	1.5	1972	1899
PEARS						
Utilized Production	Tons	8,750	1954	200	1972	1909
SWEET CHERRIES						
Utilized Production	Tons	7,700	1968	0	1972	1938
TART CHERRIES						
Utilized Production	Million Lbs	30.0	1992	1.3	1972	1938

Record Highs and Lows: Utah Livestock, Poultry, Honey, and Mink

Item	Unit	Record High		Record Low		Year Record Started
		Quantity	Year	Quantity	Year	
CATTLE & CALVES						
Inventory Jan. 1	Thou Hd	950	1983	95	1867	1867
Calf Crop	Thou Hd	395	1996	129	1935	1920
Beef Cows Jan. 1 1/	Thou Hd	374	1983	107	1939	1920
Milk Cows Jan. 1 1/	Thou Hd	126	1945	14	1867	1867
Milk Production	Mil Lbs	1,547	1996	412	1924	1924
Cattle on Feed Jan. 1	Thou Hd	81	1963 & 66	33	1986	1959
HOGS AND PIGS						
Inventory Dec. 1 2/	Thou Hd	295	1997	4	1867-69	1867
SHEEP AND LAMBS						
Stock Sheep Inventory Jan. 1	Thou Hd	2,935	1931	167	1867	1867
Lamb Crop	Thou Hd	1,736	1930	310	1997	1924
Market Sheep & Lambs Inv Jan.1	Thou Hd	85	1995	35	1998	1995
CHICKENS						
Hens & Pullets of Laying Age Dec. 1	Thou Hd	2,750	1944	1,166	1965	1925
Egg Production Total for Year	Mil Eggs	513	1995	142	1924	1924
HONEY						
Production	Thou Lbs	4,368	1963	848	1946	1913
MINK						
Pelts Produced	Thou Pelts	780	1989	283	1973	1969

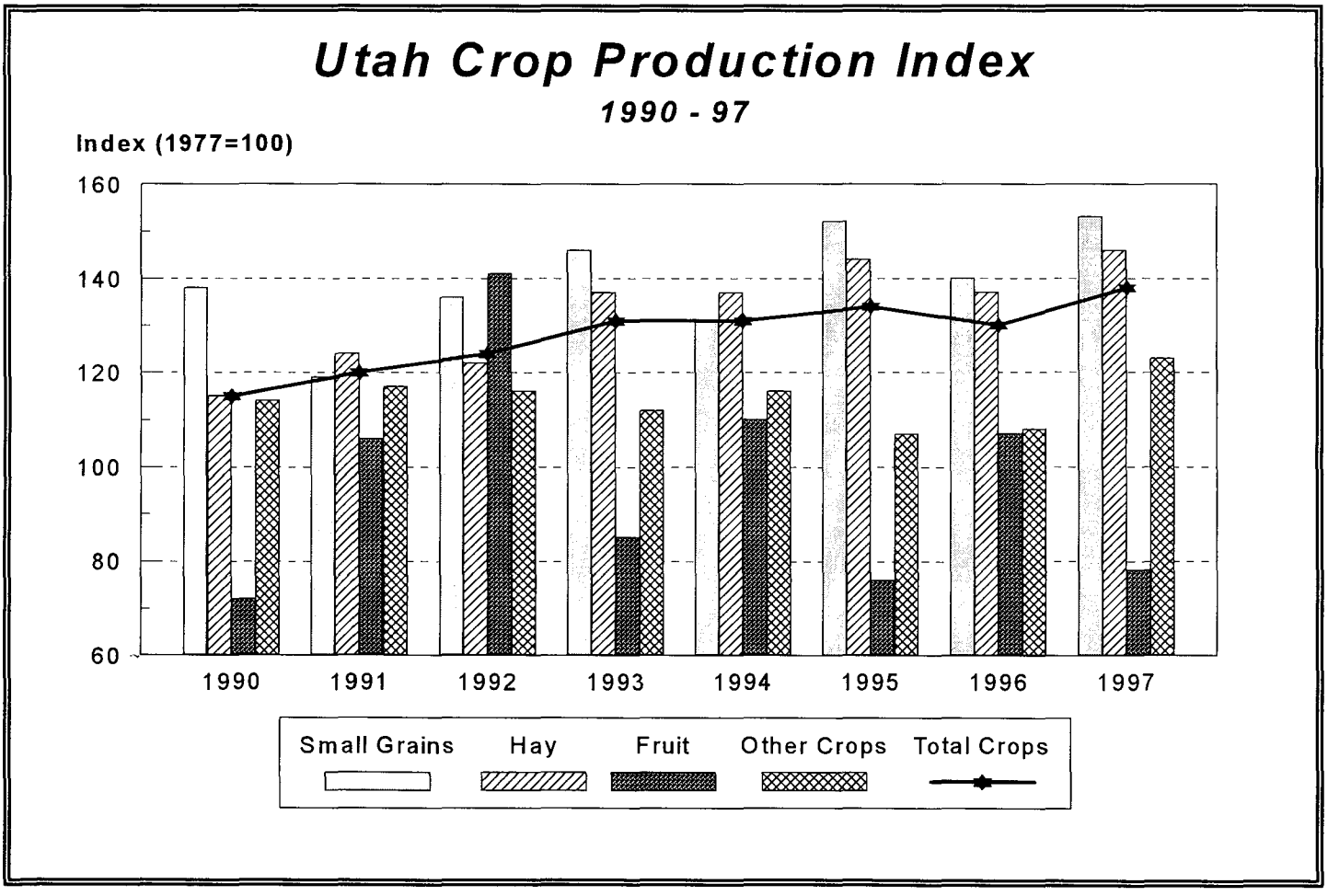
1/ Cows and heifers two years old and over prior to 1970, cows that have calved starting in 1970.
2/ January 1 estimates discontinued in 1969. December 1 estimates started 1969.



Crop Production Index (1977 = 100): Crops, by Commodity Grouping, Utah, 1990-97

Year	Small Grain	Hay	Fruit 1/	Other Crops	Total Crops
			Percent		
1990	138	115	72	114	115
1991	119	124	106	117	120
1992	136	122	141	116	124
1993	146	137	85	112	131
1994	131	137	110	116	131
1995	152	144	76	107	134
1996	140	137	107	108	130
1997	153	146	78	123	138

1/ Fruit production index is derived from total production.



Number of Farms

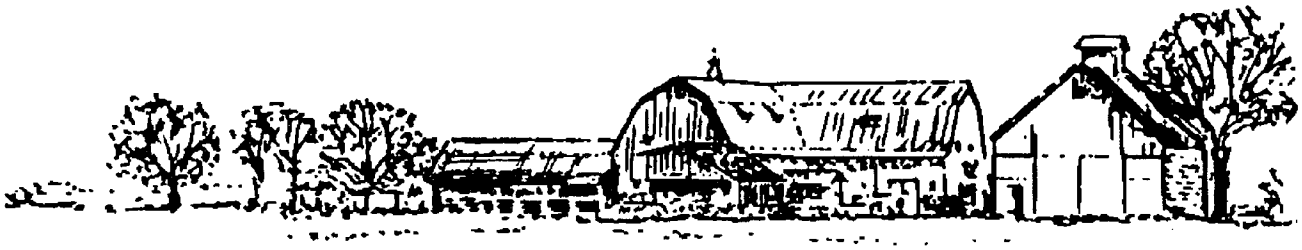
UTAH: The number of farms in Utah in 1997 was estimated at 13,400, the same level as 1996 and 1995. Total land in farms for 1997 was 11.0 million acres, same as 1996. The average size of farms in Utah, at 821 acres, remained the same as 1996.

UNITED STATES: The number of farms in the United States in 1997 was estimated at 2.06 million, down less than one percent from 1996. Total land in farms was 968 million acres, also down less than one percent from last year. This decline in farm numbers and land in farms continued to follow historical trends. The average farm size increased from 1996 to 471 acres.

Farm Numbers and Acreage: Utah and United States, 1990-97 1/

Year	Utah			United States		
	Farms	Land in Farms		Farms	Land in Farms	
		Average Size	Total		Average Size	Total
	Number	Acres	1,000 Acres	1,000 Farms	Acres	1,000,000 Acres
1990	13,200	856	11,300	2,146	460	987
1991	13,300	850	11,300	2,117	464	982
1992	13,200	856	11,300	2,108	464	979
1993	13,000	862	11,200	2,083	469	976
1994	13,000	854	11,100	2,065	471	973
1995 2/	13,400	828	11,100	2,072	469	972
1996	13,400	821	11,000	2,064	470	970
1997	13,400	821	11,000	2,058	471	968

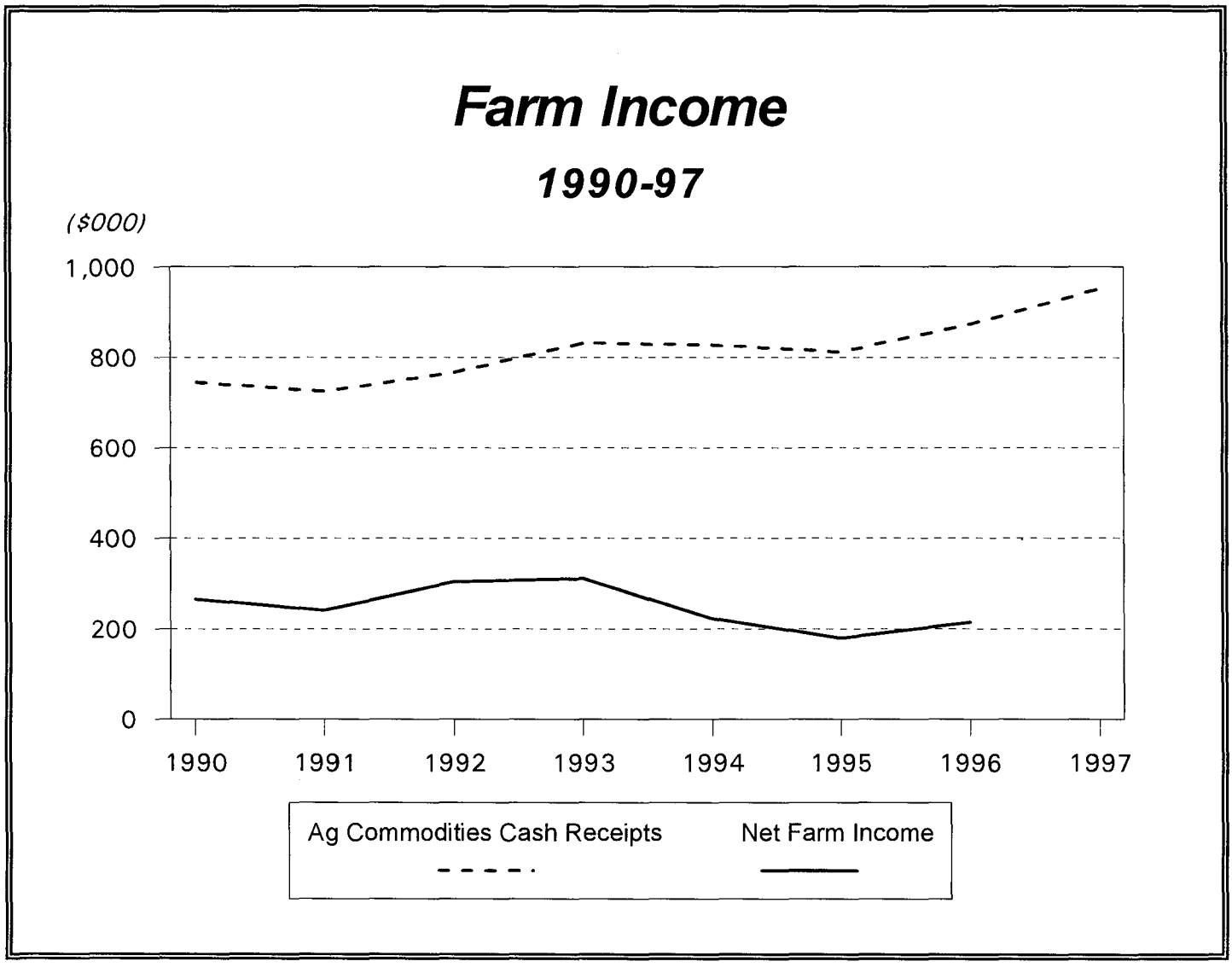
1/ A farm is defined as a place with annual sales of agricultural products of $1,000 or more. 2/ Definition changed in 1995 to include operations with no sales but which have 5 or more horses not including operations that are either stables or racetracks only.



Farm Income

Marketing of Utah crops and livestock in 1997 produced cash receipts totaling $952.0 million according to preliminary data by USDA'S Economic Research Service. This was 9 percent above 1996. The 1997 cash receipts from livestock, of $715.1 million, were 11 percent above 1996. Cash receipts from crops, at $237.0 million, were up 4 percent from 1996.

Utah's net farm income for 1996 was $213.7 million compared with $179.0 million in 1995 and $222.1 million in 1994.



Cash Receipts: by Commodity, Utah, 1993-96 1/ 2/

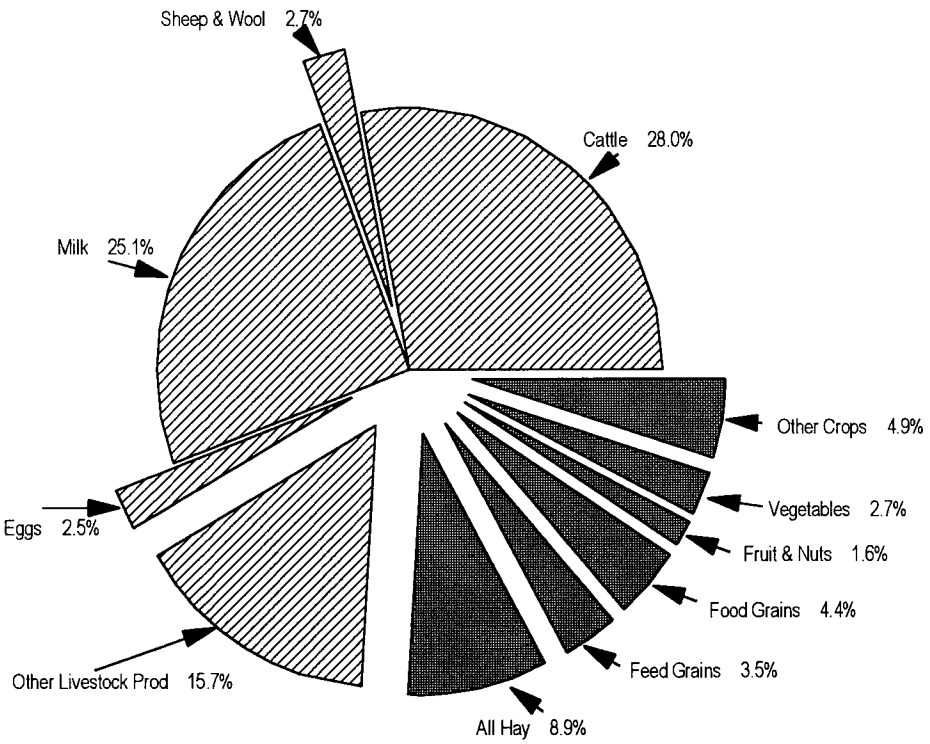
Commodity	1993		1994		1995		1996	
	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total
	1,000	Percent	1,000	Percent	1,000	Percent	1,000	Percent
ALL COMMODITIES								
All Commodities	831,397	100.0	826,950	100.0	812,019	100.0	873,143	100.0
LIVESTOCK & PRODUCTS								
Livestock & products	613,708	73.8	597,101	72.2	591,331	72.8	646,139	74.0
Meat Animals	324,755	39.1	301,793	36.5	289,677	35.7	283,824	32.5
Cattle & Calves	301,883	36.3	280,846	34.0	261,437	32.2	244,193	28.0
Hogs	5,654	0.7	4,752	0.6	5,629	0.7	18,014	2.1
Sheep & Lambs	17,218	2.1	16,195	2.0	22,611	2.8	21,617	2.5
Dairy Products	165,065	19.9	181,930	22.0	181,837	22.4	219,475	25.1
Milk, Retail	12,726	1.5	13,786	1.7	12,074	1.5	13,395	1.5
Milk, Wholesale	152,339	18.3	168,144	20.3	169,763	20.9	206,080	23.6
Poultry/Eggs	70,566	8.5	59,531	7.2	69,268	8.5	73,536	8.4
Chicken Eggs	23,655	2.8	18,453	2.2	20,135	2.5	21,885	2.5
Other Poultry	720	*	834	*	7,867	1.0	10,570	1.2
Miscellaneous	53,322	6.4	53,847	6.5	50,549	6.2	69,304	7.9
Honey	1,224	*	1,345	*	686	*	1,329	*
Wool	2,240	*	2,690	*	3,535	*	2,009	*
Other Livestock	46,878	5.6	47,464	5.7	42,732	5.3	63,477	7.3
Mink pelts	15,494	1.9	20,460	2.5	17,490	2.2	30,267	3.5
All other	31,384	3.8	27,004	3.3	25,242	3.1	33,210	3.8
CROPS								
Crops	217,689	26.2	229,849	27.8	220,688	27.2	227,004	26.0
Food Grains	21,585	2.6	25,249	3.1	32,475	4.0	38,060	4.4
Wheat	21,585	2.6	25,249	3.1	32,475	4.0	38,060	4.4
Feed Crops	104,543	12.6	112,813	13.6	110,663	13.6	108,210	12.4
Barley	18,247	2.2	14,364	1.7	19,366	2.4	22,691	2.6
Corn	5,510	0.7	5,796	0.7	5,696	0.7	6,682	0.8
Hay	79,745	9.6	91,870	11.1	85,008	10.5	78,119	8.9
Oil Crops	1,108	*	1,421	*	1,581	*	1,397	*
Vegetables	35,338	4.3	31,913	3.9	23,089	2.8	23,462	2.7
Potatoes	8,254	1.0	8,203	1.0	6,933	0.9	6,614	0.8
Onions	9,914	1.2	6,714	0.8	5,634	0.7	6,150	0.7
Miscellaneous	14,643	1.8	14,447	1.7	10,036	1.2	10,200	1.2
Fruits/Nuts	11,085	1.3	12,275	1.5	8,975	1.1	14,315	1.6
Apples	6,117	0.7	5,268	0.6	3,726	0.5	5,977	0.7
Fresh	5,517	0.7	4,655	0.6	3,016	*	5,363	0.6
Cherries	2,109	*	4,296	0.5	2,270	*	4,884	0.6
Sweet	1,149	*	2,030	*	1,646	*	2,490	*
Tart	960	*	2,266	*	624	*	2,394	*
Peaches	1,392	*	1,518	*	1,550	*	1,584	*
Other Berries	471	*	343	*	675	*	743	*
Miscellaneous	310	*	296	*	294	*	292	*
All Other Crops	44,030	5.3	46,178	5.6	43,905	5.4	41,560	4.8
Other Seeds	1,302	*	1,252	*	1,277	*	1,675	*
Other Field Crops	640	*	387	*	490	*	481	*
Christmas trees	137	*	140	*	143	*	146	*
Greenhouse/Nursery	35,546	4.3	36,842	4.5	34,983	4.3	32,378	3.7
Floriculture	23,499	2.8	24,795	3.0	28,305	3.5	25,333	2.9
Other Greenhouses	12,047	1.4	12,047	1.5	6,678	0.8	7,045	0.8

1/ Source: "Economic Indicators of the Farm Sector: State Financial Summary." Economic Research Service, USDA 2/ Individual dollar values and percents may not add to commodity grouping totals because some individual commodities with less than $1,000,000 are not published separately, or included in "other" or "miscellaneous". Percents may not add to totals due to rounding. * Less than 0.5 percent.

The graph below shows the predominance of livestock in Utah's agricultural economy . Livestock accounted for 74.0 percent of farm cash receipts in 1996, up from 72.8 percent in 1995. In 1996, cattle remained the single largest contributing commodity producing 28.0 percent of the total cash receipts. Wholesale milk cash receipts increased from 20.9 percent in 1995 to 23.6 percent in 1996. Hay continues to be the largest cash producing crop in Utah although hay cash receipts declined to 8.9 percent in 1996.

Utah Cash Receipts By Commodities

1996



Livestock & Livestock Products = 74.0%
Crops = 26.0%

Net Farm Income: Value added to the U.S. economy by the agricultural sector via the production of goods and services, Utah, 1990-96 1/ 2/

Item	1990	1991	1992	1993	1994	1995	1996
	Thousand Dollars						
FINAL AGRICULTURAL SECTOR OUTPUT	869,471	823,426	899,492	950,163	970,969	965,208	1,053,400
Final crop output	185,261	184,248	193,058	220,890	230,126	226,914	231,528
Food Grains	18,632	17,253	20,596	21,585	25,249	32,475	38,060
Feed Crops	81,996	69,362	80,691	104,543	112,813	110,663	108,210
Oil crops	0	702	714	1,108	1,421	1,581	1,397
Fruits and tree nuts	11,493	24,053	15,854	11,085	12,275	8,975	14,315
Vegetables	29,981	30,330	35,263	35,338	31,913	23,089	23,462
All other crops	32,939	33,487	40,415	44,030	46,178	43,905	41,560
Home consumption	901	771	723	428	452	675	592
Value of inventory adjustment 3/	9,319	8,290	(1,198)	2,773	(175)	5,551	3,932
Final animal output	599,095	551,225	613,208	622,695	625,105	605,837	669,863
Meat animals	296,962	301,682	288,294	324,755	301,793	289,677	283,824
Dairy products	164,763	148,580	169,532	165,065	181,930	181,837	219,475
Poultry and eggs	71,481	69,544	63,824	70,566	59,531	69,268	73,536
Miscellaneous livestock	36,170	29,800	50,954	53,322	53,847	50,549	69,304
Home consumption	8,279	8,008	7,607	6,194	7,260	6,686	6,054
Value of inventory adjustment 3/	21,440	(6,389)	32,997	2,793	20,744	7,820	17,670
Services and forestry	85,115	87,958	93,226	106,578	115,738	132,457	152,009
Machine hire and custom work	11,385	13,320	15,254	15,892	17,016	16,553	16,051
Forest products sold	200	200	290	283	94	95	97
Other farm income	19,756	18,671	20,568	24,889	21,049	26,483	37,883
Gross imputed rental value of farm	53,774	55,762	57,114	65,514	77,579	89,326	97,978
INTERMEDIATE CONSUMPTION OUTLAYS	380,579	365,387	384,710	419,859	488,353	497,794	545,219
Farm origin	164,769	149,697	154,105	169,299	180,837	189,770	212,176
Feed purchased	96,563	83,772	87,174	88,017	107,206	121,712	140,515
Livestock and poultry purchased	57,649	53,994	56,044	69,653	59,990	55,014	57,295
Seed purchased	10,557	11,931	10,887	11,629	13,641	13,044	14,366
Manufactured inputs	69,286	68,594	66,002	67,142	80,338	84,007	94,101
Fertilizers and lime	14,392	14,219	14,038	16,021	20,774	22,065	24,319
Pesticides	7,058	7,317	7,123	7,845	9,172	9,646	10,527
Petroleum fuel and oils	32,265	31,592	28,473	27,801	30,871	31,030	34,563
Electricity	15,571	15,466	16,368	15,475	19,521	21,266	24,692
Other intermediate expenses	146,524	147,096	164,603	183,418	227,178	224,017	238,942
Repair and maintenance of capital items	47,236	46,886	56,217	55,797	66,553	68,491	74,707
Machine hire and custom work	11,044	11,491	12,114	12,981	13,378	16,580	11,566
Marketing, storage, and transportation	16,040	14,190	12,776	22,552	25,043	24,388	22,273
Contract labor	4,168	3,358	3,383	3,460	3,167	4,719	5,701
Miscellaneous expenses	68,036	71,171	80,113	88,628	119,037	109,839	124,695
NET GOVERNMENT TRANSACTIONS	10,323	9,197	11,552	10,111	1,118	(7,849)	(12,792)
+ Direct Government payments	34,897	33,197	35,972	36,614	32,055	24,495	21,006
- Motor vehicle registration and licensing	3,125	3,345	3,244	3,829	5,016	4,258	4,915
- Property taxes	21,449	20,655	21,176	22,674	25,921	28,086	28,883
GROSS VALUE ADDED	499,215	467,236	526,334	540,415	483,734	459,565	495,389
Capital consumption	101,177	104,146	107,403	109,745	113,785	119,272	122,326
NET VALUE ADDED	398,038	363,090	418,931	430,670	369,949	340,293	373,063
Factor payments	132,808	122,880	115,376	119,482	147,873	161,318	159,386
Employee compensation (total hired labor)	58,041	56,874	54,572	67,250	87,998	92,120	90,876
Net rent received by non operator	6,788	5,526	7,071	3,999	7,082	12,440	11,764
Real estate and non real estate interest	67,979	60,480	53,733	48,233	52,793	56,758	56,746
NET FARM INCOME 4/	265,230	240,210	303,555	311,188	222,076	178,975	213,677

1/ Source: Economic Research Service, USDA. 2/ Final sector output is the gross value of the commodities and services produced within a year. Net value-added is the sector's contribution to the National economy and is the sum of the income from production earned by all factors-of-production. Net farm income is the farm operator's share of income from the sector's production activities. The concept presented is consistent with that employed by the Organization for Economic Cooperation and Development. 3/ A positive value of inventory change represents current-year production not sold by December 1. A negative value is an offset to production from prior years included in current-year sales. 4/ Net Farm income = final agricultural sector output minus intermediate consumption outlays plus net government transactions minus capital consumption minus factor payments.

Farm Balance Sheet: (Excluding Operator Households), Utah, December 31, 1992-96 1/ 2/

Item	1992	1993	1994	1995	1996
			Numbers		
FARMS					
Farms	13,200	13,000	13,000	13,400	13,400
			Thousand Dollars		
ASSETS					
Total Farm Assets	6,065,384	6,410,792	7,000,743	7,982,441	8,522,064
Real Estate	4,867,786	5,207,827	5,825,658	6,640,104	7,145,018
Livestock & Poultry 3/	637,914	626,929	626,445	510,964	551,603
Machinery & Motor Vehicles 4/	430,979	433,528	441,348	453,297	449,187
Crops 5/	90,334	116,226	114,267	101,262	120,730
Purchased Inputs	27,209	29,321	36,362	22,694	24,478
Financial	11,162	-3,039	-43,337	254,120	231,048
CLAIMS					
Farm Debt	654,606	651,471	669,783	689,507	938,550
By Purpose:					
Real Estate Debt	353,791	341,461	340,604	349,374	364,434
Non-Real Estate Debt 6/	300,815	310,010	329,179	340,133	574,116
By Lender:					
Farm Credit System	167,397	161,564	148,812	154,989	168,439
Farm Service Agency	86,211	83,607	82,395	77,760	77,476
Commercial banks	196,720	192,687	210,915	220,768	447,897
Life insurance companies	8,672	8,458	11,081	10,987	9,964
Individuals and others	195,606	205,156	216,582	225,003	234,773
EQUITY					
Equity	5,410,778	5,759,321	6,330,960	7,292,934	7,583,514
RATIOS					
			Percent		
Debt/Equity	12.1	11.3	10.6	9.5	12.4
Debt/Assets	10.8	10.2	9.6	8.6	11.0

1/ Source: Economic Research Service/USDA.
2/ Data are for farms with sales of $1,000 or more annually.
3/ Excludes horses, mules, and broilers.
4/ Includes only farm share value for trucks and autos.
5/ All non-CCC crops held on farms plus the value above loan rate for crops held under CCC.
6/ Excludes debt for non-farm purposes.

Field Crops

Precipitation during the October 1, 1996 through September 30, 1997 water year was 141 percent of normal for the state. Divisions ranged from 130 to 181 percent of normal.

PRINCIPAL CROPS

Utah farmers planted 1.13 million acres to principal crops in 1997, down 1 percent from 1996. Harvested acres were 1.07 million acres, slightly less than 1996. Preliminary total value of principal crops was $314.9 million compared with $277.6 million in 1996.

HAY

Alfalfa hay harvested, at 545,000 acres, was unchanged from 1996. Yield averaged 4.3 tons per acre, up from 4.0 tons in 1996. Total production of 2.3 million tons was up 8 percent from 1996.

Other hay harvested, at 155,000 acres, compared with 160,000 acres harvested in 1996. The average yield of 2.20 tons per acre produced 341,000 tons, up 5 percent from 1996.

The 1997 **all hay** crop was valued at $222.2 million which was up 28 percent from 1996. The price per ton, at $85.50, was up $13.50 from the previous year.

SMALL GRAINS

Planted acreage for all wheat was 200,000 acres, down 2 percent from 1996; barley planted, at 100,000 acres, was down 10,000 acres; while oats, at 50,000 acres, were up 5,000 acres.

Winter wheat harvested acreage, at 160,000 acres, was unchanged from 1996, and the yield, at 49 bushels per acre, was up from the 38 bushels per acre in 1996. Total production, at 7.8 million bushels, was up 1.8 million bushels from 1996. Value of production increased 3 percent to $27.8 million.

Spring wheat harvested acreage, at 29,000 acres, was up 4 percent from 1996. The average yield, at 46 bushels per acre, was 14 bushels below the previous year, and production, at 1.3 million bushels, was down 21 percent from the previous year. Value of production, at $4.9 million, was down 33 percent from 1996.

Barley acreage harvested, at 95,000 acres, was 5 percent below 1996. Production, at 8.2 million bushels, was 30,000 bushels less than 1996. The average yield of 86 bushels per acre was 4 bushels above the previous year. The 1997 barley crop was valued at $18.8 million, down $5.2 million from 1996.

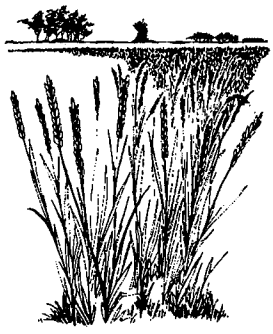
Oat production, at 666,000 bushels, was 3 percent above the previous year. Growers harvested 9,000 acres for grain, the same as the previous year. The value of production, at $1.3 million, was down 5 percent from the previous year.

CORN

Corn acreage planted **for all purposes**, at 67,000 acres, was up 3 percent from 1996.

Corn acreage harvested **for grain**, at 23,000 acres, was up 10 percent from 1996. The average yield for grain, at 135 bushels per acre, was up 5 bushels from the previous year. Grain production totaled 3.1 million bushels, up 14 percent from 1996. The crop was valued at $9.6 million, down 7 percent from the previous year.

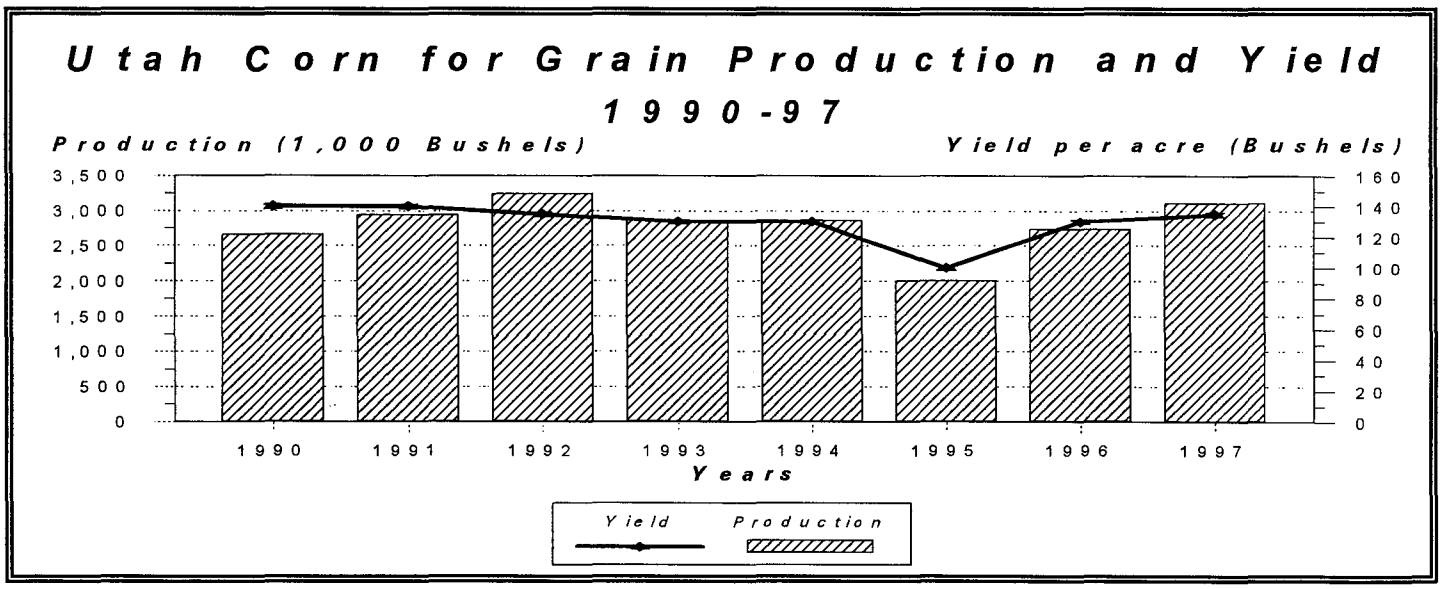
Corn for silage production totaled 1.0 million tons compared with 882,000 tons in 1996. A total of 43,000 acres was harvested. The value of the crop was $28.9 million compared with $24.7 million in 1996.



Corn Planted and Harvested for Silage and Grain: Acreage, Yield, Production, and Value, Utah, 1990-97

Year	Planted for All Purposes	Acres Harvested	Yield Per Acre	Production	Marketing Year Average Price	Value of Production
SILAGE						
	..... 1,000 Acres		Tons	1,000 Tons	Dollars per Ton 1/	1,000 Dollars
1990	65	45	20.5	923	26.00	23,998
1991	68	44	21.0	924	22.00	20,328
1992	68	42	19.0	798	24.00	19,152
1993	68	44	20.0	880	24.00	21,120
1994	67	43	22.0	946	26.00	24,596
1995	68	47	20.0	940	25.00	23,500
1996	65	42	21.0	882	28.00	
1997	67	43	24.0	1,032	28.00	28,896
GRAIN						
	..... 1,000 Acres		Bushels	1,000 Bushels	Dollars per Bushel	1,000 Dollars
1990	65	19	140.0	2,660	2.79	7,421
1991	68	21	140.0	2,940	2.92	8,585
1992	68	24	135.0	3,240	2.74	8,878
1993	68	22	130.0	2,860	3.12	8,923
1994	67	22	130.0	2,860	2.92	8,351
1995	68	20	100.0	2,000	3.88	7,760
1996	65	21	130.0	2,730	3.80	10,374
1997	67	23	135.0	3,105	3.10	9,626

1/ Price or value per ton in silo or pit.



Small Grains: Acreage, Yield, Production, and Value, Utah, 1990-97

Year	Acres		Yield per Acre	Production	Marketing Year Average Price	Value of Production
	Planted 1/	Harvested				
	..... 1,000 Acres		Bushels	1,000 Bushels	Dollars per Bushel	1,000 Dollars
WINTER WHEAT 1/						
1990	155	150	40.0	6,000	2.83	16,980
1991	140	130	36.0	4,680	3.45	16,146
1992	145	135	40.0	5,400	3.27	17,658
1993	160	155	39.0	6,045	3.40	20,553
1994	170	150	40.0	6,000	3.66	21,960
1995	145	140	50.0	7,000	4.75	33,250
1996	175	160	38.0	6,080	4.45	27,056
1997	170	160	49.0	7,840	3.55	27,832
SPRING WHEAT						
1990	30	26	45.0	1,170	2.92	3,416
1991	25	23	49.0	1,127	3.20	3,606
1992	25	22	48.0	1,056	3.30	3,485
1993	27	25	49.0	1,225	3.30	4,043
1994	24	22	46.0	1,012	3.60	3,643
1995	28	26	75.0	1,950	4.70	9,165
1996	30	28	60.0	1,680	4.40	7,392
1997	30	29	46.0	1,334	3.70	4,936
ALL WHEAT						
1990	185	176	40.7	7,170	2.83	20,396
1991	165	153	38.0	5,807	3.40	19,752
1992	170	157	41.1	6,456	3.28	21,143
1993	187	180	40.4	7,270	3.40	24,596
1994	194	172	40.8	7,012	3.65	25,603
1995	173	166	53.9	8,950	4.74	42,415
1996	205	188	41.3	7,760	4.40	34,448
1997	200	189	48.5	9,174	3.60	32,768
BARLEY						
1990	115	105	81.0	8,505	2.37	20,157
1991	105	95	83.0	7,885	2.25	17,741
1992	125	115	78.0	8,970	2.23	20,003
1993	115	110	85.0	9,350	2.22	20,757
1994	115	107	75.0	8,025	2.32	18,618
1995	100	93	90.0	8,370	3.08	25,780
1996	110	100	82.0	8,200	2.93	24,026
1997	100	95	86.0	8,170	2.30	18,791
OATS						
1990	40	12	68.0	816	1.68	1,371
1991	50	8	77.0	616	1.60	986
1992	45	15	70.0	1,050	1.63	1,712
1993	50	13	78.0	1,014	1.69	1,714
1994	40	8	75.0	600	1.65	990
1995	50	9	70.0	630	2.05	1,292
1996	45	9	72.0	648	2.10	1,361
1997	50	9	74.0	666	1.95	1,299

1/ Planted in preceeding fall.

Field Crops: Acreage, Yield, Production, and Value, Utah, 1990-97

Year	Acres		Yield per Acre	Production	Marketing Year Average Price	Value of Production
	Planted	Harvested				
DRY BEANS 1/						
	1,000 Acres		Pounds	1,000 Cwt	Dollars per Cwt	1,000 Dollars
1990	5.5	4.0	330	13	19.00	247
1991	6.0	5.5	480	26	14.00	364
1992	6.0	5.7	700	40	19.90	796
1993	6.4	6.1	390	24	28.00	672
1994	6.5	6.3	380	24	18.00	432
1995	7.3	7.0	460	32	19.00	608
1996	5.0	0.6	1,600	10	24.00	240
1997	5.8	5.6	700	39	17.50	683
POTATOES						
	1,000 Acres		Cwt	1,000 Cwt	Dollars per Cwt	1,000 Dollars
1990	6.3	6.2	265	1,643	6.00	9,858
1991	6.1	6.0	270	1,620	5.25	8,505
1992	6.1	6.0	275	1,650	5.40	8,910
1993	6.3	6.2	265	1,643	5.70	9,365
1994	6.1	6.0	265	1,590	5.80	9,222
1995	5.2	5.1	240	1,224	5.10	6,242
1996	4.3	4.2	280	1,176	4.90	5,762
1997	3.1	3.1	295	915	4.35	3,980

1/ Excludes beans grown for garden seed.

Potatoes: Production, Farm Use, Sales, and Value, Utah, 1990-97

Year	Production	Total Used for Seed 1/	Farm Disposition			Price per Cwt	Value of Sales
			Used on Farms Where Grown		Sold		
			For Seed, Feed, & Household Use	Shrinkage, & Loss			
	1,000 Cwt					Dollars	1,000 Dollars
1990	1,643	153	53	158	1,432	6.00	8,592
1991	1,620	146	18	200	1,402	5.25	7,361
1992	1,650	153	20	105	1,525	5.40	8,235
1993	1,643	165	23	168	1,452	5.70	8,276
1994	1,590	130	5	185	1,400	5.80	8,120
1995	1,224	103	2	125	1,097	5.10	5,595
1996	1,176	78	1	108	1,067	4.90	5,228
1997 2/	915	3/	3/	3/	3/	4.35	3/

1/ Includes seed purchased and seed used on farms where grown. 2/ Preliminary. 3/ Available September 22, 1998.

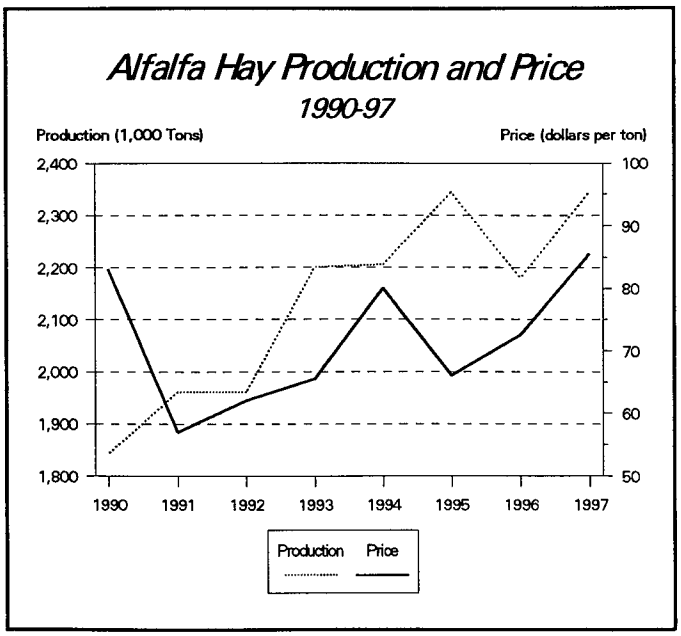
Hay: Acreage, Yield, Production, and Value, Utah, 1990-97

Year	Acres Harvested	Yield per Acre	Production	Marketing Year Average Price	Value of Production
	1,000 Acres	Tons	1,000 Tons	Dollars per Ton	1,000 Dollars
ALFALFA & ALFALFA MIXTURE					
1990	485	3.80	1,843	83.00	152,969
1991	490	4.00	1,960	57.00	111,720
1992	490	4.00	1,960	62.00	121,520
1993	500	4.40	2,200	65.50	144,100
1994	525	4.20	2,205	80.00	176,400
1995	545	4.30	2,344	66.00	154,704
1996	545	4.00	2,180	72.50	158,050
1997	545	4.30	2,344	85.50	200,412
ALL OTHER HAY 1/					
1990	140	2.00	280	72.50	20,300
1991	150	2.10	315	47.00	14,805
1992	140	2.00	280	43.00	12,040
1993	150	2.20	330	50.50	16,665
1994	160	2.00	320	64.00	20,480
1995	150	2.00	300	49.50	14,850
1996	160	2.10	336	46.50	15,624
1997	155	2.20	341	64.00	21,824
ALL HAY					
1990	625	3.40	2,123	79.50	173,269
1991	640	3.55	2,275	56.00	126,525
1992	630	3.56	2,240	61.00	133,560
1993	650	3.89	2,530	65.00	160,765
1994	685	3.69	2,525	79.50	196,880
1995	695	3.80	2,644	66.00	169,554
1996	705	3.57	2,516	72.00	173,674
1997	700	3.84	2,685	85.50	222,236

1/ Includes clover, timothy, grain, other tame and wild hays.

Hay: Stocks on Farms, May 1 and December 1, Utah, 1990-1998

Year	May 1	December 1
	1,000 Tons	
1990	238	1,274
1991	297	1,593
1992	319	1,344
1993	246	1,518
1994	323	1,452
1995	245	1,481
1996	349	1,327
1997	302	1,630
1998	435	

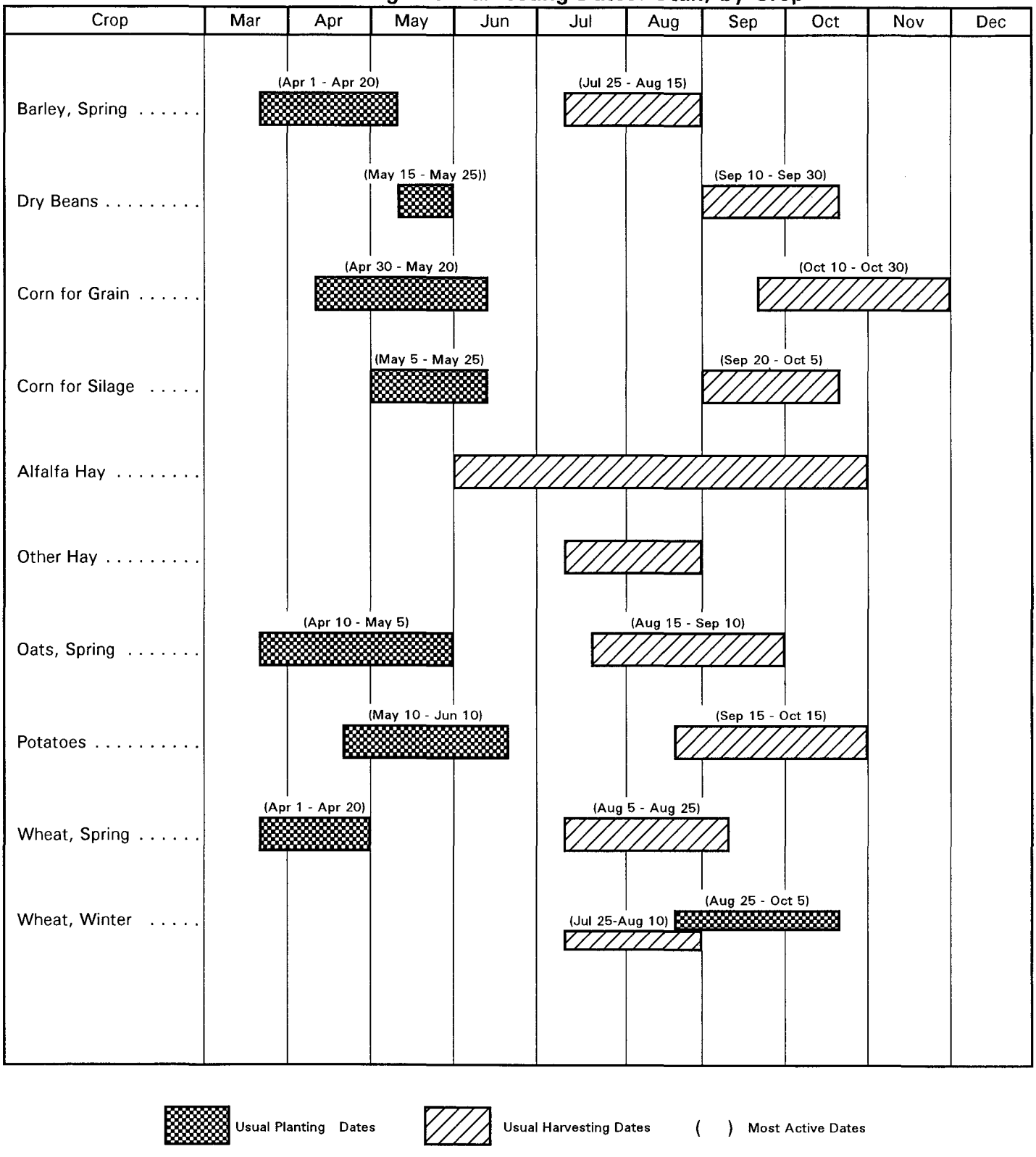


Grain Stocks Stored Off Farm : Wheat, Barley, Oats, and Corn, Utah, by Quarters, 1990-98 1/

Year	March 1	June 1	September 1	December 1
		1,000 Bushels		
ALL WHEAT				
1990	5,736	4,102	7,196	5,024
1991	6,564	4,923	6,170	6,435
1992	6,504	3,429	6,711	6,808
1993	5,881	4,404	4,765	5,908
1994	6,542	4,369	5,856	3,264
1995	5,106	3,625	5,165	5,807
1996	5,143	3,684	2,998	3,248
1997	3,775	3,398	4,401	6,410
1998	5,557	2/		
BARLEY				
1990	1,565	848	2,698	1,194
1991	1,734	706	2,117	2,103
1992	1,427	605	2,872	2,538
1993	1,694	973	2,799	3,284
1994	2,356	1,106	3,172	1,757
1995	1,063	512	1,823	1,937
1996	1,129	557	1,915	1,499
1997	1,295	440	2,058	1,601
1998	1,367	2/		
OATS				
1990	177	97	177	181
1991	170	102	114	179
1992	193	174	232	278
1993	151	119	88	143
1994	191	72	3/	3/
1995	3/	52	142	115
1996	71	136	76	3/
1997	119	37	3/	95
1998	96	2/		
CORN				
1990	1,517	561	169	865
1991	908	480	475	826
1992	775	432	384	675
1993	543	519	306	581
1994	646	519	255	573
1995	564	437	475	543
1996	609	377	476	865
1997	697	261	3/	632
1998	727	2/		

1/ Includes stocks at mills, elevators, warehouses, terminals, and processors. 2/ Estimates available June 30, 1998. 3/ Not published to avoid disclosure of individual operations.

Usual Planting and Harvesting Dates: Utah, by Crop



Usual Planting Dates Usual Harvesting Dates ( ) Most Active Dates

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Fruits

Utah's 1997 preliminary estimates of fruit production were lower than the previous year for apples, tart cherries, sweet cherries, and pears, while peach production remained the same. Prices were lower for apples, peaches, and sweet cherries, but higher for pears. Estimates are subject to revision July 7, 1998.

Apple production during 1997, at 40 million pounds, was 17 percent lower than the 1996 crop. Utilized production was 39 million pounds. Producers received an average price of 11.0 cents per pound, 2.6 cents less than the previous year. The 1997 total value of utilized production, at $4.3 million, was 28 percent lower than the previous year.

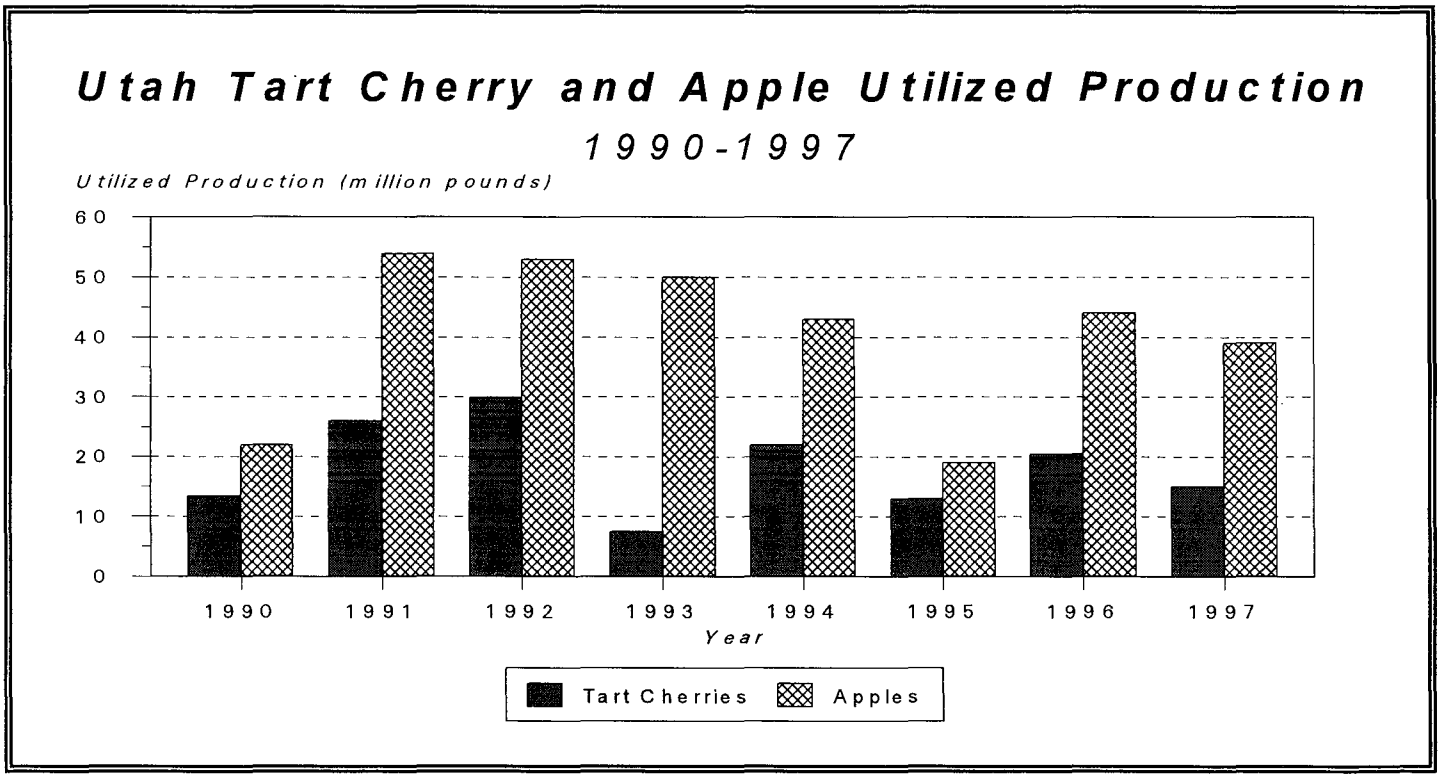
There was no significant commercial apricot production in 1997 due to freeze damage.

Peach production, at 7.0 million pounds, was the same as 1996. Utilized production was 6.5 million pounds compared with 6.6 million pounds in 1996. Average price per pound was 27 cents bringing total value of the crop to $1.8 million, 17 percent lower than 1996.

Pear production in Utah, at 900 tons, was 40 percent lower than the year before. The average price received by growers was $586 per ton, $103 per ton more than 1996. Total value of the crop was $504,000, down 13 percent from the year earlier.

Sweet Cherry producers harvested 600 tons, 1,700 tons less than 1996. Utilized production was 580 tons. Average price received by growers was $883 per ton, down $247 from the previous year. The total value of the crop was $512,000, down 79 percent from 1996.

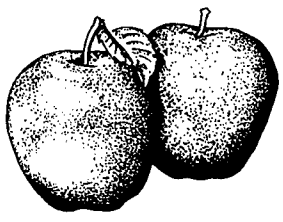
Tart Cherry production during 1997 was 17.5 million pounds, 34 percent lower than 1996. Utilized production was 15.0 million pounds. Tart cherry prices for the 1997 crop will not be published until July 7, 1998.

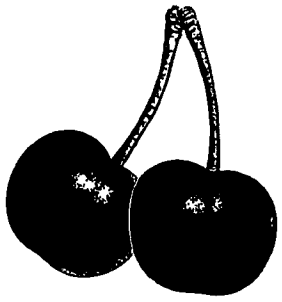


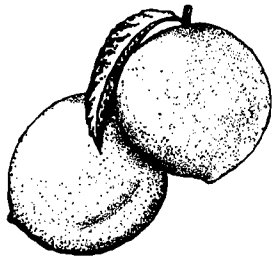
Fruit: Acreage, Yield, Production, Use, and Value, Utah, 1990-97

Year	Bearing Acreage	Yield per Acre 1/	Production			Utilization		Average Price	Value of Utilized Production
			Total	Not Utilized	Utilized	Fresh	Processed		
	Acres	Pounds	Million Pounds					Cents per Lb	1,000 Dollars
COMMERCIAL APPLES									
1990	3,500	6,860	24.0	2.0	22.0	18.0	4.0	18.8	4,132
1991	3,300	16,700	55.0	1.0	54.0	38.0	16.0	18.0	9,740
1992	3,100	18,100	56.0	3.0	53.0	38.0	15.0	12.9	6,830
1993	3,000	17,700	53.0	3.0	50.0	39.0	11.0	12.1	6,043
1994	3,000	16,000	48.0	5.0	43.0	32.0	11.0	12.1	5,192
1995	3,000	6,670	20.0	1.0	19.0	13.0	6.0	18.8	3,580
1996	2,800	17,100	48.0	4.0	44.0	33.0	11.0	13.6	5,984
1997	2,800	14,300	40.0	1.0	39.0	2/	2/	11.0	4,290
TART CHERRIES									
1990	--	--	15.5	2.0	13.5	0.1	13.4	14.1	1,906
1991	--	--	26.0	--	26.0	0.1	25.9	44.6	11,583
1992	--	--	33.0	3.0	30.0	0.3	29.7	14.0	4,200
1993		--	15.0	7.5	7.5	0.1	7.4	12.8	960
1994	3,700	7,160	26.5	4.5	22.0	--	22.0	10.3	2,266
1995	3,700	5,950	22.0	9.0	13.0	--	13.0	4.8	624
1996	3,400	7,790	26.5	6.0	20.5	--	20.5	12.7	2,604
1997	3,400	5,150	17.5	2.5	15.0	--	15.0	2/	2/
PEACHES									
1990	1,600	7,500	12.0	0.5	11.5	11.5	--	24.0	2,760
1991	1,400	1,790	2.5	--	2.5	2.5	--	34.0	850
1992	1,200	6,080	7.3	1.1	6.2	3/	3/	22.0	1,364
1993	1,000	6,000	6.0	0.2	5.8	5.8	--	24.0	1,392
1994	1,000	7,400	7.4	0.8	6.6	6.6	--	23.0	1,518
1995	1,000	6,300	6.3	0.1	6.2	6.2	--	25.0	1,550
1996	1,000	7,000	7.0	0.4	6.6	6.6	--	32.0	2,112
1997	1,000	7,000	7.0	0.5	6.5	6.5	--	27.0	1,755

1/ Yield is based on total production. 2/ Estimates available July 7, 1998. 3/ Not published to avoid disclosure of individual operations.



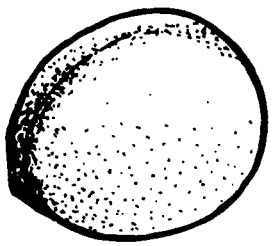


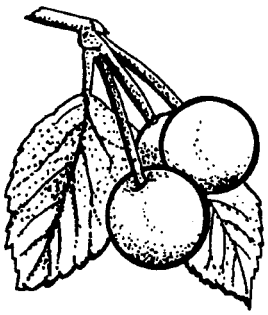


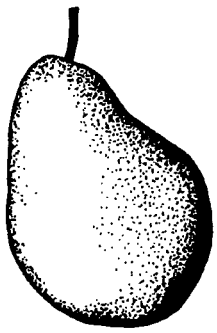
Fruit: Acreage, Yield, Production, Use, and Value, Utah, 1990-97

Year	Bearing Acreage	Yield per Acre 1/	Production			Utilization		Average Price	Value of Utilized Production
			Total	Not Utilized	Utilized	Fresh	Processed		
	Acres		Tons					Dollars per Ton	1,000 Dollars
APRICOTS									
1990			250	10	240	240	--	460	110
1991			100	10	90	90	--	820	74
1992			600	100	500	500	--	620	310
1993			250	10	240	240	--	525	126
1994			400	20	380	380	--	511	194
1995 2/									
1996			300	10	290	290	--	859	249
1997 2/									
SWEET CHERRIES									
1990	720	1.94	1,400	50	1,350	500	850	645	871
1991	690	1.16	800	--	800	460	340	875	700
1992	660	4.24	2,800	50	2,750	650	2,100	621	1,709
1993	630	1.98	1,250	50	1,200	650	550	958	1,149
1994	630	3.65	2,300	50	2,250	1,400	850	902	2,030
1995	630	3.17	2,000	100	1,900	1,200	700	866	1,646
1996	630	3.65	2,300	100	2,200	1,300	900	1,130	2,490
1997	630	0.95	600	20	580	300	280	883	512
PEARS									
1990	290	6.21	1,800	--	1,800	1,800	--	380	684
1991	260	6.15	1,600	--	1,600	1,600	--	440	704
1992	220	5.45	1,200	--	1,200	1,200	--	400	480
1993	190	7.89	1,500	100	1,400	1,400	--	400	560
1994	190	6.32	1,200	200	1,000	1,000	--	360	360
1995	190	5.79	1,100	100	1,000	1,000	--	460	460
1996	190	7.89	1,500	300	1,200	1,200	--	483	580
1997	190	4.74	900	40	860	860	--	586	504

1/ Yield is based on total production. 2/ No significant commercial production due to frost damage.







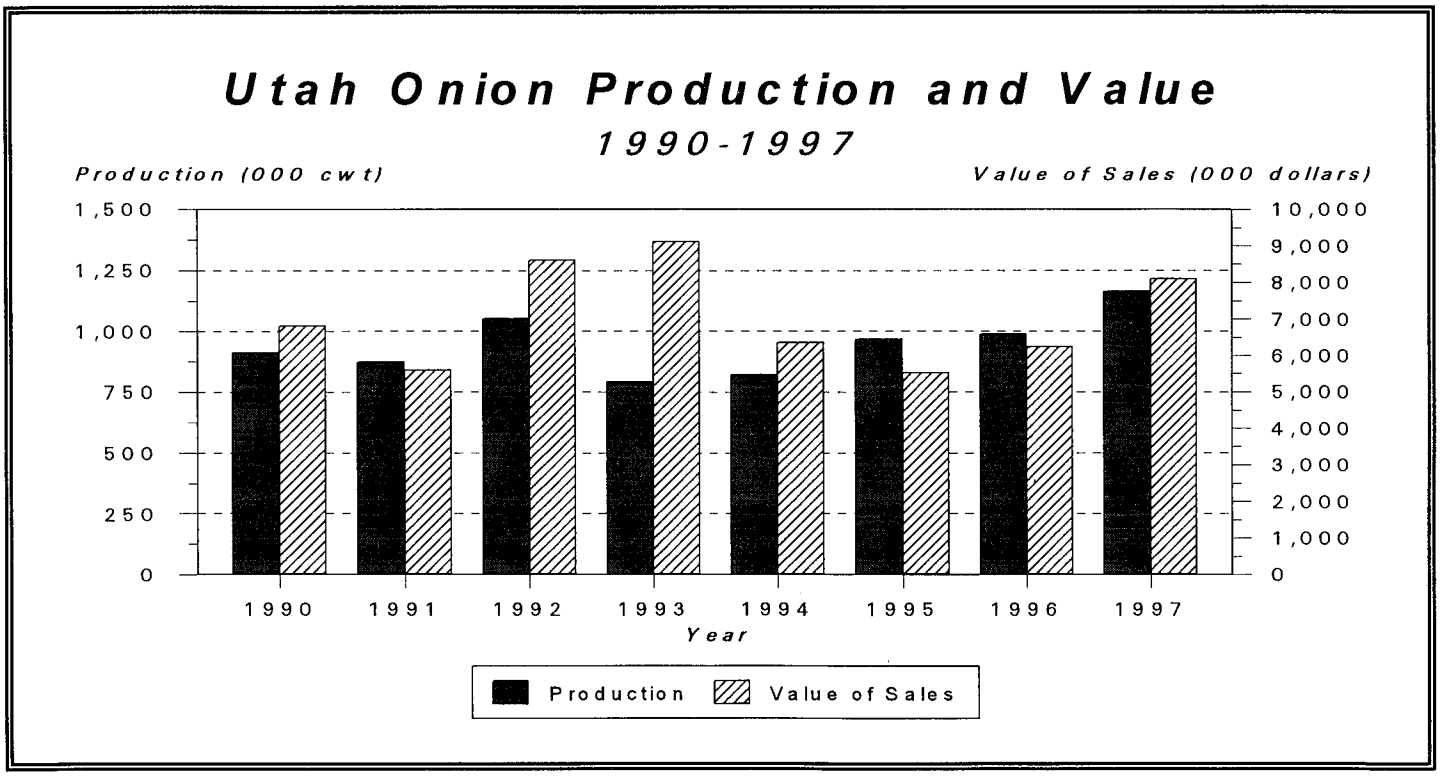
Onions

Utah onion growers produced 1.2 million cwt of onions in 1997. This was 18 percent above the previous year's estimate. Growers planted 2,500 acres, up 300 acres from 1996. They harvested 2,400 acres during the year, an increase of 300 acres from 1996. The yield per acre was 485 cwt, 15 cwt above the previous year. Farmers received an average of $8.84 per cwt for their onions. Total value of the crop was $8.1 million, up 30 percent from 1996.

Onions: Summer Storage (Fresh Market), Acreage, Yield, Production, and Value, Utah, 1990-97

Year	Acreage		Yield per Acre	Production	Quantity Not Sold 1/	Sales	Value of Sales	
	Planted	Harvested					Per Cwt	Total
	..... Acres		Cwt	..... 1,000			Dollars	1,000 Dollars
1990	2,000	1,900	480	912	100	812	8.40	6,821
1991	2,000	1,900	460	874	157	171	7.80	5,593
1992	2,100	2,000	525	1,050	158	892	9.65	8,608
1993	2,100	1,800	440	792	277	515	17.70	9,116
1994	2,200	2,000	410	820	120	700	9.09	6,363
1995	2,300	2,200	440	968	106	862	6.40	5,517
1996	2,200	2,100	470	987	207	780	8.00	6,240
1997 2/	2,500	2,400	485	1,164	248	916	8.84	8,097

1/ Includes shrinkage, waste, and cullage. 2/ Preliminary estimates. Estimates subject to revision in the Vegetable Report July 9, 1998.



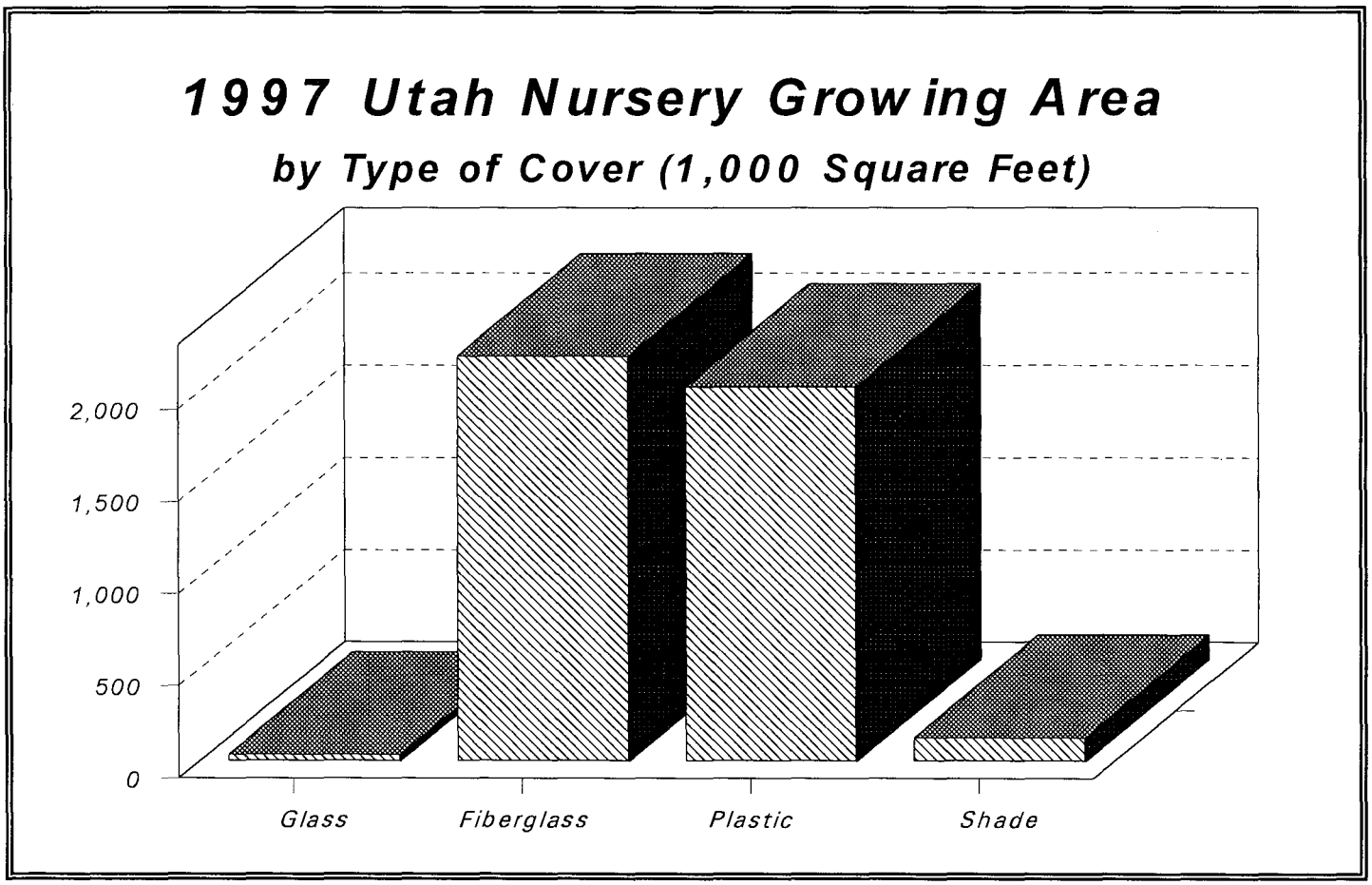
Floriculture

In 1997 there were 82 growers of floriculture in Utah with wholesale values of sales of $10,000 or more. They had 4.4 million square feet of covered growing area. The total wholesale value of all reported crops for growers with more than $100,000 in sales was $23.8 million. Of the $23.8 million, the value of sales for cut flowers was $708,000, potted flowering plants $10.0 million, foliage for indoor or patio use $1.3 million, and total bedding/garden plants $11.8 million.

Floriculture Crops: Wholesale Value of Sales, Utah, Selected Types, 1992-97 1/

Year	Total Cut Flowers	Total Potted Flowering Plants	Total Foliage for Indoor or Patio Use	Total Bedding/Garden Plants	Total Wholesale Value of Reported Crops
			1,000 Dollars		
1992	3,641	4,689	1,206	8,547	18,083
1993	3,479	4,963	2,661	9,666	20,769
1994	3,036	7,468	1,707	10,049	22,260
1995	2,811	8,581	2,033	12,780	26,205
1996	1,865	7,326	2,386	12,532	24,146
1997	708	10,021	1,300	11,791	23,820

1/ Based only on reported numbers from growers with $100,000 or more in sales of floriculture crops.



Potted Flowers: Quantity Sold Wholesale, Utah, Selected Types, 1992-98 1/

Year	Easter Lilies	Poinsettias	New Guinea Impatiens 2/	Other Flowering and Foliar Bed Plants	Hardy Garden Chrysanthemums
			1,000 Pots		
1992	3/	447		3/	110
1993	102	701		3/	246
1994	191	843	18	877	296
1995	169	709	52	676	170
1996	175	467	47	1,368	242
1997	171	836	36	1,420	204
1998 4/	245	1,040	30	1,975	260

See footnotes at bottom of page

Bedding Plants: Quantity Sold Wholesale, Utah, Selected Types, 1992-98 1/

Year	Geraniums	Impatiens 2/	Petunias 2/	Other Flowering and Foliar Type Bedding Plants 5/	Vegetable Bedding Plants
			1,000 Flats		
1992	3/			749	124
1993	19			764	102
1994	77	54	120	559	98
1995	46	76	151	676	130
1996	62	80	163	656	124
1997	49	60	177	493	97
1998 4/	62	59	188	584	108

See footnotes at bottom of page

Hanging Baskets: Quantity Sold Wholesale, Utah, Selected Types, 1994-98 1/ 2/

Year	Geraniums	Impatiens	Other Flowering
		1,000 Baskets	
1994	18	11	50
1995	17	10	40
1996	14	8	49
1997	19	8	62
1998 4/	19	14	73

See footnotes at bottom of page

1/ Based only on reported numbers from growers with $100,000 or more in sales of floriculture crops. 2/ Estimates began in 1994. 3/ Not published to avoid disclosure of individual operations. 4/ Intentions for 1998. 5/ Other flowering and foliage type bedding plants. Excludes Geraniums, Impatiens, New Guinea Impatiens, Petunias, and Vegetable type bedding plants.

Cattle and Calves

Utah cattlemen had a total of 870,000 cattle and calves on farms and ranches January 1, 1998, a decrease of 60,000 head from January 1, 1997. Beef cows, at 340,000 head, were down 15,000 head from 1997. Milk cows, at 90,000 head, remained the same as January 1, 1997. Beef cow replacement heifers weighing 500 pounds or more were estimated at 64,000 head, 6,000 less than the January 1, 1997 number. Milk cow replacements totaled 50,000 head compared with 45,000 head in 1997. Other heifers, at 76,000 head, increased 3,000 head from the previous year's level. Steers 500 pounds and over totaled 115,000 head, 23,000 head fewer than the previous year. Bulls, at 21,000 head, were down 3,000 head from the 1997 level. Calves weighing less than 500 pounds were estimated at 114,000 head, 21,000 head fewer than the January 1, 1997 level.

Utah's 1997 calf crop totaled 370,000 head, down 6 percent from the 1996 level.

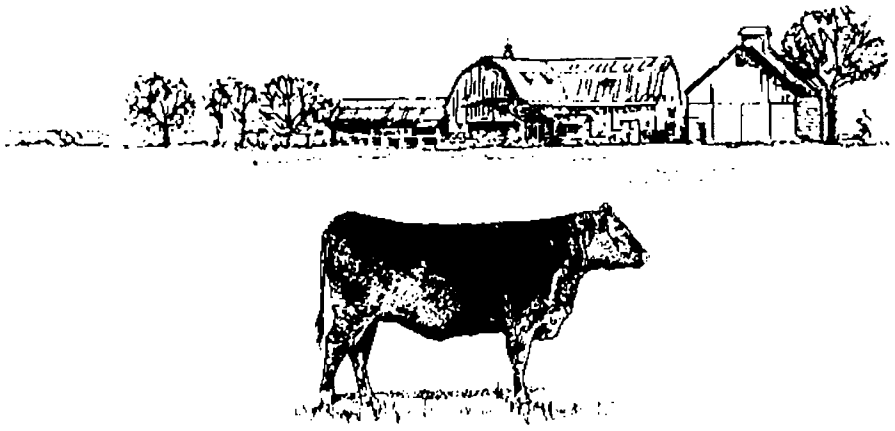
Cattle and calves on full feed for slaughter totaled 40,000 head January 1, 1998, down 10,000 from 1997.

Value per head of all cattle and calves averaged $600.00 January 1, 1998 compared with $530.00 per head on January 1, 1997. Total inventory was valued at $522.0 million, up 6 percent from 1997.

Utah operations with cattle and calves in 1997 totaled 7,800, the same number of farms as 1996. The breakdown by size group was as follows: 4,200 operations with 1 to 49 head; 1,000 with 50 to 99 head; 2,200 with 100 to 499 head; 260 with 500 to 999 head; and 140 with 1,000 head or more. Operations with more than 500 head accounted for 40 percent of the Utah cattle inventory and those with 100 to 499 head accounted for 46 percent.

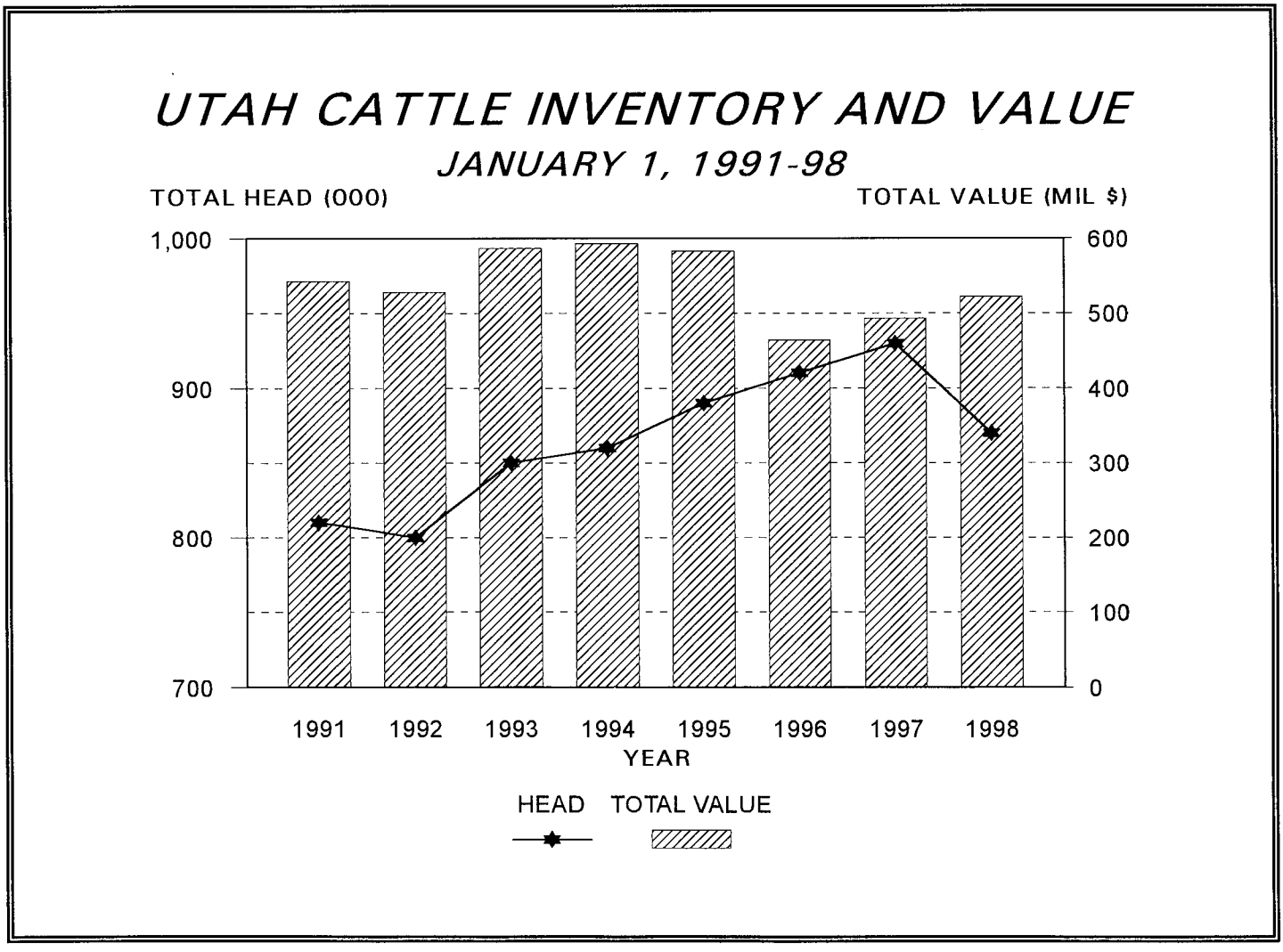
Beef production during 1997 totaled 376.0 million pounds, down one percent from the previous year. Marketings during the year totaled 482.9 million pounds, up 9 percent from 1996.

Cash receipts for 1997 totaled $319.9 million, up 31 percent from the previous year. Price of cattle averaged $65.00 per hundredweight (cwt), up $10.00 from 1996. The 1997 average slaughter cow price at $37.00 per cwt compares with $32.00 in 1996. The 1997 steer and heifer price at $68.00 per cwt was $11.00 above 1996. The average price for calves less than 500 pounds during 1997 was $80.00 per cwt, up $22.00 from 1996.



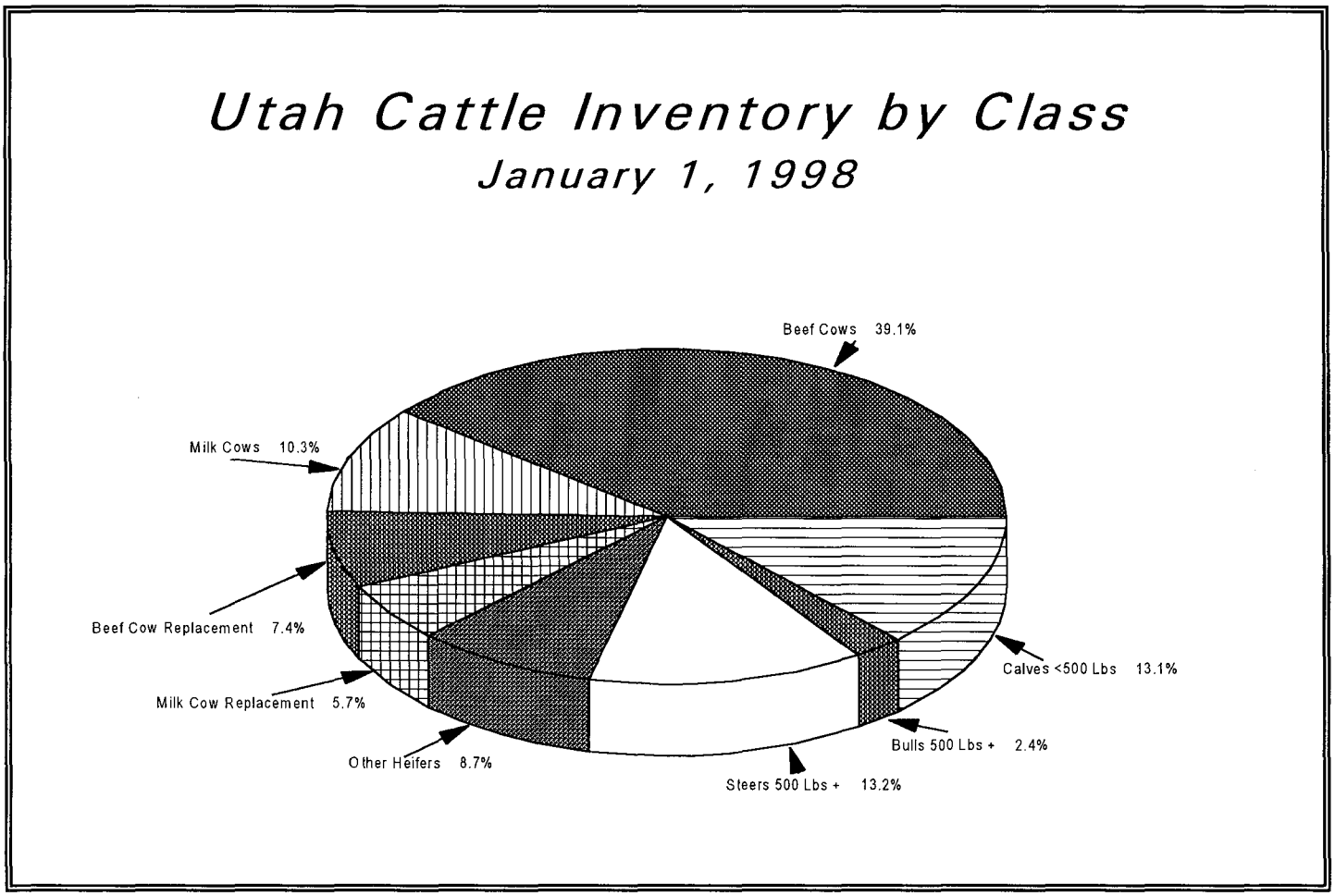
Cattle: Farms, Inventory, and Value, Utah, January 1, 1991-98

Year	Farms		All Cattle and Calves on Farms January 1			
	With Cattle	With Milk Cows	On Feed For Market	Total Number	Value	
					Per Head	Total
	..... Number		1,000 Head	1,000 Head	Dollars	1,000 Dollars
1991	7,600	1,500	52	810	670.00	542,700
1992	7,800	1,500	50	800	660.00	528,000
1993	7,800	1,400	58	850	690.00	586,500
1994	7,700	1,200	45	860	690.00	593,400
1995	7,700	1,000	60	890	655.00	582,950
1996	7,800	900	60	910	510.00	464,100
1997	7,800	900	50	930	530.00	492,900
1998	--	--	40	870	600.00	522,000



Cattle: Inventory by Classes and Weight, Utah, January 1, 1991-98

Year	All Cattle and Calves	All Cows that have Calved			Heifers 500 Pounds & Over				Steers 500 Lbs & Over	Bulls 500 Lbs & Over	Calves Under 500 Lbs
		Total	Beef Cows	Milk Cows	Total	Beef Cow Replace-ments	Milk Cow Replace-ments	Other			
						1,000 Head					
1991	810	400	320	80	146	58	52	36	110	19	135
1992	800	400	324	76	145	58	48	39	107	20	128
1993	850	425	345	80	156	62	50	44	112	21	136
1994	860	425	345	80	163	70	45	48	115	21	136
1995	890	430	345	85	175	70	46	59	130	21	134
1996	910	435	350	85	175	68	43	64	141	22	137
1997	930	445	355	90	188	70	45	73	138	24	135
1998	870	430	340	90	190	64	50	76	115	21	114



All Cattle & Calves: Number of Operations & Percent of Total Inventory by Size Groups, 1993-1997

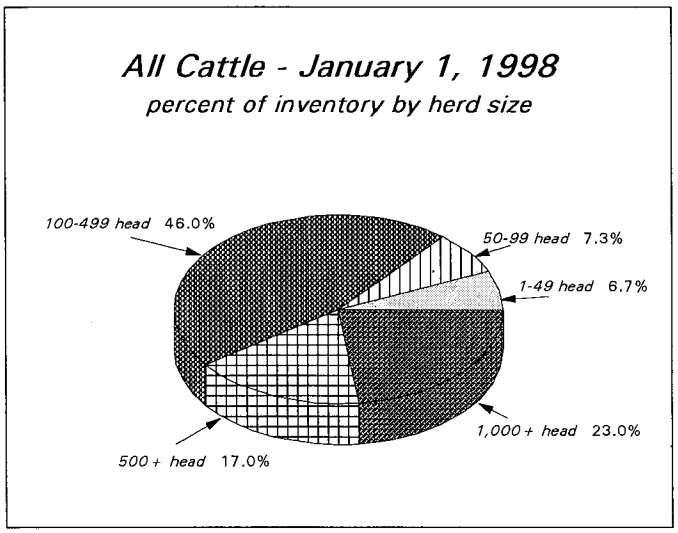
Year	1-49 Head		50-99 Head		100-499 Head		500-999 Head		1,000 Head & Over	
	Operations	Inventory	Operations	Inventory	Operations	Inventory	Operations	Inventory	Operations	Inventory
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1993	4,400	7.0	1,100	9.0	1,900	43.0	260	18.0	140	23.0
1994	4,300	7.0	1,100	9.0	1,900	42.0	270	19.0	130	23.0
1995	4,300	7.3	1,100	8.7	1,900	42.0	270	19.0	130	23.0
1996	4,300	7.4	1,100	8.6	2,000	44.0	280	18.0	120	22.0
1997	4,200	6.7	1,000	7.3	2,200	46.0	260	17.0	140	23.0

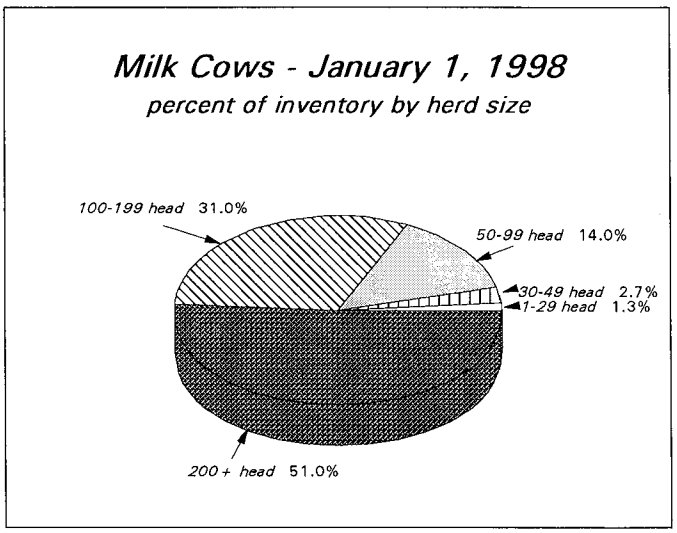
Beef Cows: Number of Operations & Percent of Total Inventory by Size Groups, 1993-1997

Year	1-49 Head		50-99 Head		100-499 Head		500 Head & Over	
	Operations	Inventory	Operations	Inventory	Operations	Inventory	Operations	Inventory
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1993	3,300	13.0	750	14.0	840	46.0	110	27.0
1994	3,300	13.0	750	14.0	850	46.0	100	27.0
1995	3,300	13.0	790	13.0	900	46.0	110	28.0
1996	3,400	13.0	790	14.0	890	45.0	120	28.0
1997	3,200	12.0	870	15.0	910	45.0	120	28.0

Milk Cows: Number of Operations & Percent of Total Inventory by Size Groups, 1993-1997

Year	1-29 Head		30-49 Head		50-99 Head		100-199 Head		200 Head & Over	
	Operations	Inventory	Operations	Inventory	Operations	Inventory	Operations	Inventory	Operations	Inventory
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1993	660	1.8	100	4.2	290	21.7	220	28.9	130	43.4
1994	530	2.0	80	4.0	270	23.0	200	30.0	120	41.0
1995	400	1.5	70	3.5	210	17.0	200	32.0	120	46.0
1996	300	1.3	70	2.7	190	16.0	210	31.0	130	49.0
1997	320	1.3	70	2.7	170	14.0	210	31.0	130	51.0

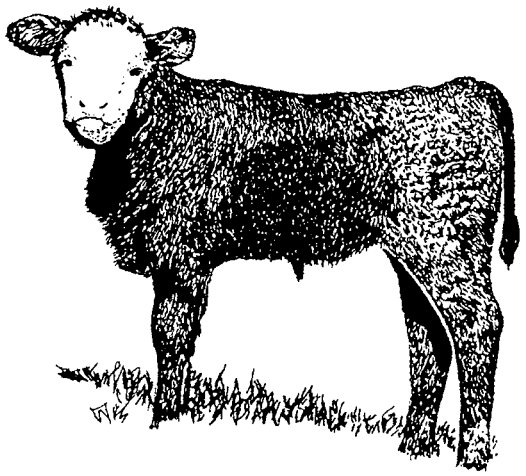




Calf Crop: Utah, 1990-97

Year	Cows That Have Calved January 1	Calf Crop	
		Total	Percent of Cows Calved January 1 1/
	1,000 Head		Percent
1990	405	350	86
1991	400	330	83
1992	400	370	93
1993	425	355	84
1994	425	380	89
1995	430	385	90
1996	435	395	91
1997	445	370	83

1/ Not strictly a calving rate. Figure represents calf crop expressed as percentage of number of cows that have calved on hand January 1 beginning of year.



Cattle and Calves: Balance Sheet, Utah, 1990-97

Year	Inventory Beginning of Year	Calf Crop	Inshipments	Marketings 1/		Farm Slaughter Cattle & Calves 2/	Deaths		Inventory End of Year
				Cattle	Calves		Cattle	Calves	
				1,000 Head					
1990	780	350	89	291	75	5	12	26	810
1991	810	330	86	310	72	5	11	28	800
1992	800	370	90	296	68	4	12	30	850
1993	850	355	85	297	86	2	15	30	860
1994	860	380	99	314	87	4	14	30	890
1995	890	385	102	332	91	4	14	26	910
1996	910	395	120	349	96	4	15	31	930
1997	930	370	95	385	98	4	13	25	870

1/ Includes custom slaughter for use on farms where produced, State outshipments, but excludes interfarm sales within the State. 2/ Excludes custom slaughter at commercial establishments.

Cattle and Calves: Production, Marketings and Income, Utah, 1990-97

Year	Production 1/	Marketings 2/	Average Price per 100 Lbs		Value of Production	Cash Receipts 3/	Value of Home Consumption	Gross Income
			Cattle	Calves				
	1,000 Pounds		Dollars		1,000 Dollars			
1990	330,355	366,020	73.80	93.90	250,963	276,303	7,675	283,978
1991	327,505	387,020	71.30	95.80	240,100	283,178	7,415	290,593
1992	352,920	367,960	71.60	90.40	258,497	268,701	7,446	276,147
1993	350,060	377,550	78.10	98.00	280,008	301,883	5,686	307,569
1994	362,310	397,200	69.00	88.00	256,263	280,845	6,458	287,304
1995	370,160	419,900	61.40	71.10	230,543	261,438	5,747	267,185
1996	381,600	441,840	55.00	58.00	211,039	244,193	5,148	249,341
1997	375,990	482,880	65.00	80.00	249,287	319,899	6,084	325,983

1/ Adjustments made for changes in inventory and for inshipments. 2/ Excludes custom slaughter for use on farms where produced and interfarm sales within the State. 3/ Receipts from marketings and sale of farm slaughter.

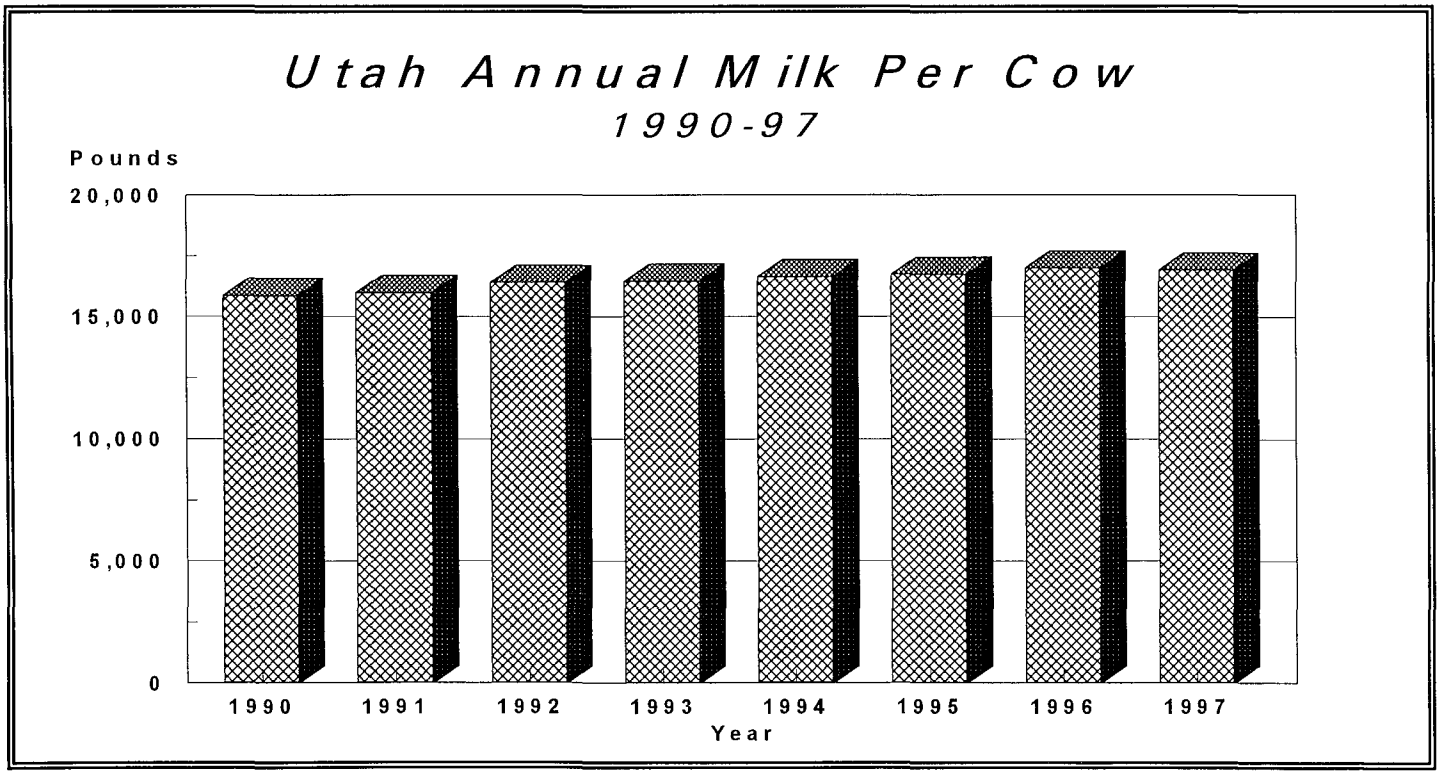
Dairy

Milk production in Utah reached 1.54 billion pounds in 1997, virtually the same as 1996. Production per cow, at 16,923 pounds, decreased 77 pounds from the previous year. The 1997 milkfat per cow was 609 pounds, 8 pounds lower than the 1996 average.

There were an estimated 900 farms with one or more milk cows during 1997, the same as 1996. The breakdown of dairy farms by herd size was as follows: 320 farms with 1 to 29 head, 70 farms with 30 to 49 head, 170 farms with 50 to 99 head, 210 farms with 100 to 199 head, and 130 farms with 200 or more cows. The largest percent of the Utah milk cow inventory fell in the 200 cows or more herd size which accounted for 51 percent. The herd size with the second largest percent of inventory was the 100 to 199 size group with 31 percent. The 320 farms in the 1 to 29 head category accounted for only 1.3 percent.

Cash receipts from milk marketings during the year totaled $196 million, a decrease of 11 percent compared to 1996. The average price per hundredweight of all milk was $12.91 compared to $14.44 received the previous year.

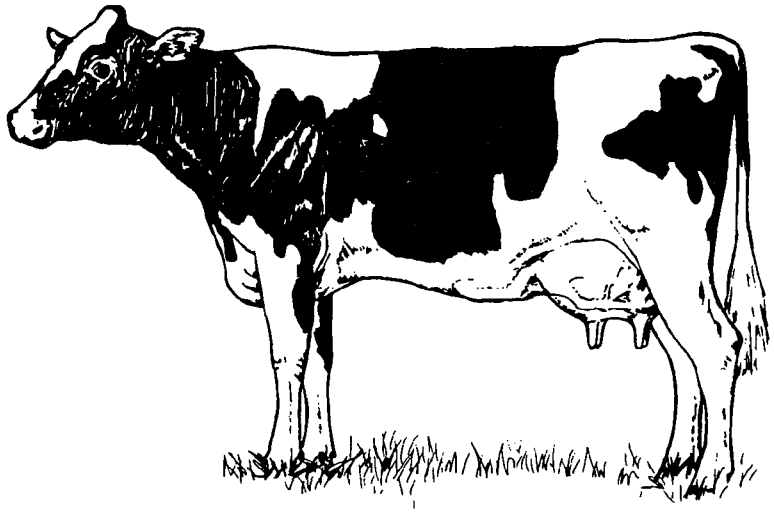
Utah's 1997 total cheese production excluding cottage cheese was 63.5 million pounds, 25 percent below the previous year. American cheese, at 29.7 million pounds, decreased 19 percent from the 1996 level. Cheddar cheese accounted for 63 percent of the total American cheese produced. Production of Swiss cheese totaled 23.2 million pounds, a 35 percent decrease from 1996. Swiss cheese accounted for 37 percent of the total cheese produced. Other types of cheese accounted for the remainder of the cheese produced. Hard ice cream production, at 10.4 million gallons, was 8 percent below 1996. There were 21 dairy plants in Utah that produced one or more dairy products in 1997, two less than 1996.



Dairy: Milk Cows and Milk Production, Utah, by Quarter, 1990-97

Year	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Annual Total 1/
MILK COWS (1,000 Head) 2/ 3/					
1990	80	81	80	80	80
1991	79	80	80	78	79
1992	81	83	83	82	82
1993	81	83	81	80	81
1994	80	86	88	88	86
1995	87	88	88	88	88
1996	90	92	92	90	91
1997	92	93	91	89	91
MILK PER COW (Pounds) 4/ 5/					
1990	3,750	4,025	4,038	3,975	15,838
1991	3,772	4,063	4,088	4,000	15,975
1992	3,914	4,157	4,145	4,134	16,402
1993	3,963	4,181	4,173	4,075	16,444
1994	4,088	4,279	4,284	4,080	16,640
1995	4,057	4,295	4,307	4,125	16,739
1996	3,978	4,315	4,359	4,344	17,000
1997	4,065	4,366	4,330	4,112	16,923
MILK PRODUCED (Million Pounds) 4/ 6/					
1990	300	326	323	318	1,267
1991	298	325	327	312	1,262
1992	317	345	344	339	1,345
1993	321	347	338	326	1,332
1994	327	368	377	359	1,431
1995	353	378	379	363	1,473
1996	358	397	401	391	1,547
1997	374	406	394	366	1,540

1/ Milk cows is average number during year, milk per cow and milk produced is total for year. 2/ Includes dry cows, excludes heifers not yet freshened. 3/ Average for quarter. 4/ Excludes milk sucked by calves. 5/ Quarterly milk production divided by quarterly average of milk 6/ Total produced for quarter.



Dairy: Farms, Milk Production and Milkfat, Utah, 1990-97

Year	Farms with Milk Cows	Number of Milk Cows on Farms 1/	Production of Milk & Milkfat				
			Per Cow		Total		
			Milk	Milkfat	Percentage Milkfat	Milkfat	Milk
	Number	1,000 Head	Pounds		Percent	Million Pounds	
1990	1,500	80	15,838	569	3.59	45.5	1,267
1991	1,500	79	15,975	575	3.60	45.4	1,262
1992	1,500	82	16,402	592	3.61	48.6	1,345
1993	1,400	81	16,444	592	3.60	48.0	1,332
1994	1,200	86	16,640	601	3.61	51.7	1,431
1995	1,000	88	16,739	604	3.61	53.2	1,473
1996	900	91	17,000	617	3.63	56.2	1,547
1997	900	91	16,923	609	3.60	55.4	1,540

1/ Average number on farms during year, excluding heifers not yet freshened.

Milk Disposition: Milk Used and Marketed by Farmers, Utah, 1990-97

Year	Milk Used on Farms Where Produced			Milk Marketed by Producers		
	Fed to Calves	Consumed as Fluid Milk and Cream	Total	Sold to Plants and Dealers	Sold Directly to Consumers	Total
	Million Pounds					
1990	22	3	25	1,200	42	1,242
1991	21	3	24	1,183	55	1,238
1992	22	3	25	1,266	54	1,320
1993	22	3	25	1,259	48	1,307
1994	20	3	23	1,356	52	1,408
1995	24	2	26	1,403	44	1,447
1996	24	3	27	1,472	48	1,520
1997	18	2	20	1,473	47	1,520

Milk & Cream Sold: Quantity, Price & Cash Receipts, Utah, 1990-97

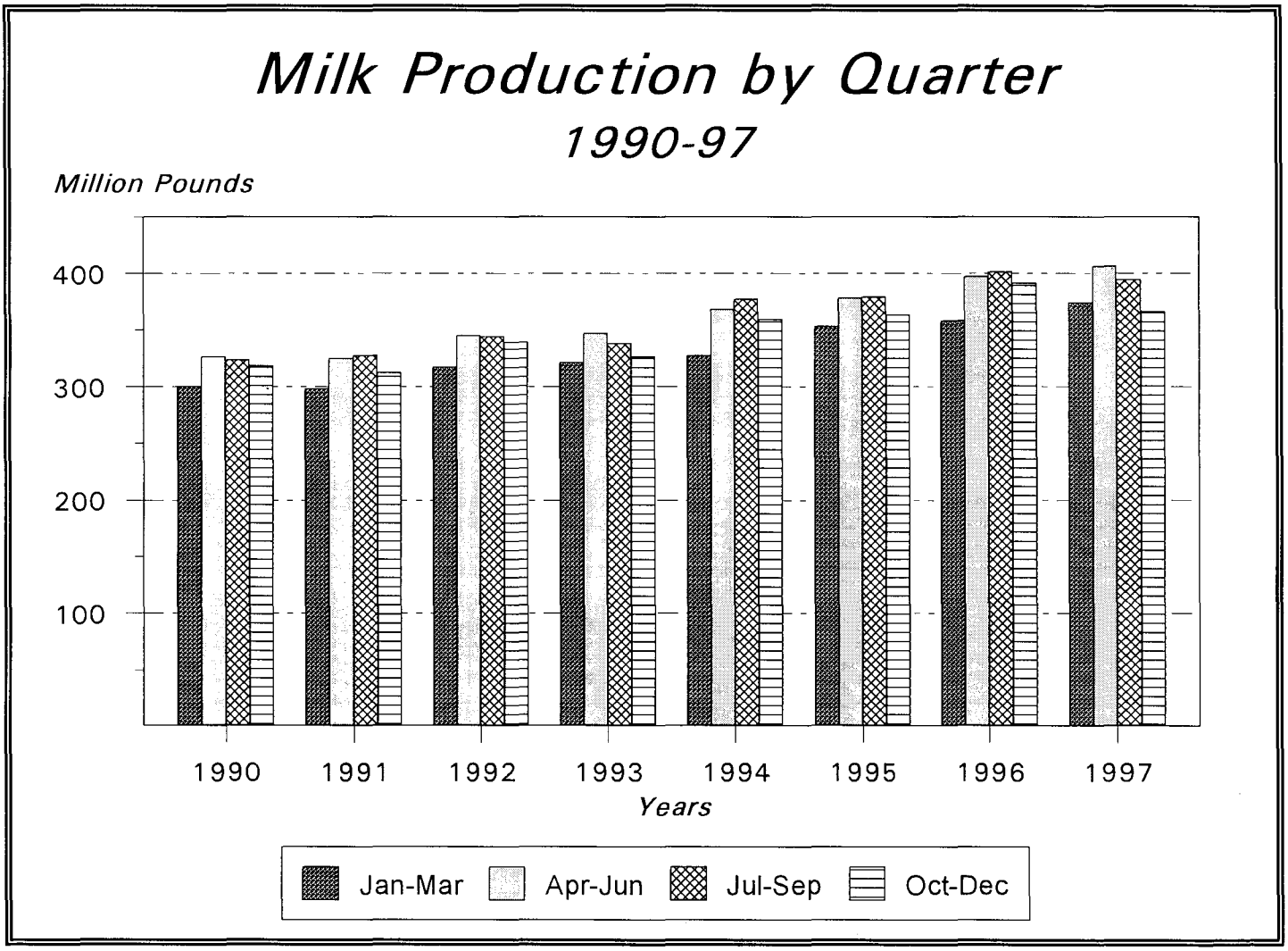
Year	Milk Sold to Plants & Dealers				Milk Sold Directly to Consumers 2/		
	Quantity	Percent Fluid Grade 1/	Price per 100 Lb	Cash Receipts	Quantity	Price per Quart	Cash Receipts
	Million Pounds	Percent	Dollars	1,000 Dollars	1,000 Quarts	Cents	1,000 Dollars
1990	1,200	82	12.90	154,800	19,535	51	9,963
1991	1,183	85	11.50	136,045	25,581	49	12,535
1992	1,266	85	12.30	155,718	25,116	55	13,814
1993	1,259	88	12.10	152,339	22,326	57	12,726
1994	1,356	90	12.40	168,144	24,186	57	13,786
1995	1,403	90	12.10	169,763	20,465	59	12,074
1996	1,472	91	14.00	206,080	22,326	60	13,395
1997	1,473	91	12.30	181,179	21,860	69	15,084

1/ Percentage of milk sold to plants and dealers eligible for fluid use. 2/ Also includes milk produced by institutional herds.

Milk & Cream: Marketings, Used on Farm, Income, and Value, Utah, 1990-97

Year	Combined Marketings of Milk & Cream				Used for Milk, Cream, Butter on Farms Where Produced		Gross Producer Income from Milk 1/	Farm Value of Milk Produced 2/
	Milk Utilized	Average Returns		Cash Receipts from Marketings	Milk Utilized	Value		
		Per 100 Pounds Milk	Per Pound Milkfat					
	Million Pounds	..... Dollars		1,000 Dollars	Million Pounds	..... 1,000 Dollars		
1990	1,242	13.27	3.70	164,763	3	398	165,161	168,079
1991	1,238	12.00	3.33	148,580	3	360	148,940	151,460
1992	1,320	12.84	3.56	169,532	3	385	169,917	172,743
1993	1,307	12.63	3.51	165,065	3	379	165,443	168,222
1994	1,408	12.92	3.58	181,930	3	388	182,318	184,902
1995	1,447	12.57	3.48	181,837	2	251	182,089	185,105
1996	1,520	14.44	3.98	219,475	3	433	219,909	223,374
1997	1,520	12.91	3.59	196,263	2	258	196,521	198,845

1/ Cash receipts from marketings of milk and cream, plus value of milk used for home consumption. 2/ Includes value of milk fed to calves.



Cheese: Production, Utah, 1990-97

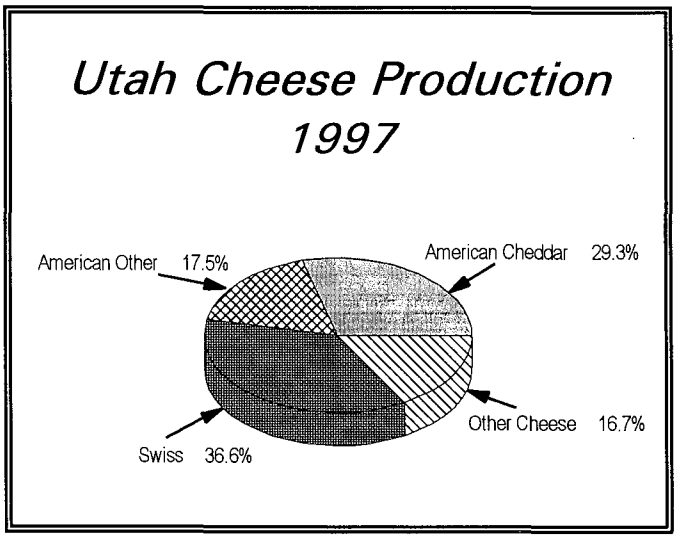
Year	American			Swiss 1/	Total Other Cheese 2/	Total 3/
	Cheddar	Other	Total			
	1,000 Pounds					
1990	26,814	13,953	40,767	24,598	4,839	70,204
1991	28,900	14,167	43,067	24,473	4,034	71,574
1992	38,447	14,281	52,728	24,227	10,500	87,455
1993	24,539	9,858	34,397	27,134	16,822	78,353
1994	32,093	10,429	42,522	26,501	17,144	86,167
1995	28,756	10,174	38,930	29,032	12,931	80,893
1996	24,029	12,625	36,654	35,645	12,403	84,702
1997	18,587	11,092	29,679	23,239	10,613	63,531

1/ Data for years with less than 3 plants published by permission of the firms involved. 2/ Includes cheese other than American and Swiss. 3/ Excludes cottage cheese.

Frozen Products and Dry Whey: Production, Utah, 1990-97

Year	Hard Ice Cream	Sherbet	Dry Whey		
			Human Food	Animal Feed	Total
	1,000 Gallons		1,000 Pounds		
1990	7,728	559	2/	2/	2/
1991	7,130	456	2/	2/	2/
1992	9,243	598	22,087	2,683	24,770
1993	9,370	479	25,283	1,459	26,742
1994	10,055	490	26,038	1,589	27,627
1995	12,035	638	24,948	2,333	27,281
1996	11,323	751	17,310	1,939	19,249
1997	10,423	1,096	21,471	2,278	23,749

1/ Not published to avoid disclosure of individual operations.



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Sheep and Wool

Utah sheep and lamb inventory on January 1, 1998 totaled 350,000 head, a decline of 25,000 head from 1997. Inventory of breeding sheep and lambs at the beginning of 1998 was 315,000 head, down 7 percent from 1997. Ewes one year old and older totaled 265,000 head, down 25,000 head from a year earlier. Rams over one year of age totaled 9,000 head, the same as January 1, 1997. Breeding replacement lambs, at 41,000 head, was 1,000 head more than the 1997 inventory. Market sheep and lambs for slaughter totaled 35,000 head. The 1997 lamb crop was estimated at 310,000 head, 15,000 head below the previous year.

Sheep and lamb operations totaled 1,600 in 1997, one hundred more than 1996. January 1, 1998 sheep and lamb inventory had an average value per head of $120.00, up $10.00 from the 1997 level. Utah's sheep inventory value totaled $42.0 million, up 2 percent from the previous year.

Cash receipts during 1997 totaled $21.9 million, 2 percent higher than the 1996 level. Marketings of sheep and lambs totaled 29.8 million pounds, up 2 percent from the previous year. The average 1997 sheep price was $32.70 per hundredweight (cwt), $8.80 above the 1996 average. Lambs averaged $87.20 per cwt during 1997 which was $1.30 above the previous year.

Wool production totaled 2.9 million pounds during 1997, down 6 percent from the 1996 production level. Average fleece weight, at 9.4 pounds, was up 2 percent from the 1996 level.

NOTE: Sheep and lamb classifications for the inventory estimates were changed starting January 1, 1995. "Breeding sheep and lambs" replaced the old "stock sheep and lambs" estimates. Replacement lambs now include both ewe and ram lambs. "Market sheep and lambs" has replaced the old "sheep and lambs on feed" estimates. Market lamb estimates are by weight group. Both "breeding sheep and lambs" and "market sheep and lambs" include new crop lambs. New crop lambs are lambs born after September 30 the previous year on hand January 1. Prior to 1995, January estimates excluded the new crop lambs.

Sheep and Lambs: Farms, Inventory, and Value, Utah, January 1, 1991-98

Year	Farms With Sheep	Sheep and Lambs on Farms January 1				
		Number 1/	Value		Total Breeding 2/	Total Market 3/
			Per Head	Total		
	Number	1,000 Head	Dollars	1,000 Dollars	..... 1,000	
1991	2,200	508	64.00	32,512	480	28
1992	2,300	488	65.00	31,720	460	28
1993	2,100	490	81.00	39,690	450	40
1994	2,000	442	77.00	34,034	410	30
1995	1,900	445	84.00	37,380	360	85
1996	1,700	395	100.00	39,500	355	40
1997	1,600	375	110.00	41,250	339	36
1998	4/	350	120.00	42,000	315	35

1/ All sheep beginning January 1, 1995 includes new crop lambs. Previous published data did not. New crop lambs are lambs born after September 30 the previous year on hand January 1. 2/ Breeding sheep and lambs beginning January 1, 1995. 3/ Market sheep and lambs beginning January 1, 1995. 4/ Estimate published with January 1, 1999 sheep inventory.

Stock Sheep and Lambs and Lamb Crop: Inventory by Class, January 1, Utah, 1990-95 1/

Year	Stock Sheep and lambs on Farms January 1					Lamb Crop 2/	
	Total	Lambs		Sheep One Year & Over		Number	As Percent of Ewes One year and Older 3/
		Ram & Wether	Ewe	Ram & Wether	Ewe		
	1,000 Head						Percent
1989	480	4	57	12	405	430	106
1990	485	7	58	13	407	430	106
1991	480	7	58	12	403	400	99
1992	460	7	53	12	388	400	103
1993	450	7	53	12	378	350	93
1994	410	8	49	13	340	360	106

1/ Beginning January 1, 1995 sheep inventory estimates were changed to breeding sheep and lambs and market sheep and lambs. 2/ Lamb crop defined as lambs marked, docked or branded. 3/ Not strictly a lambing rate. Percent represents lambs saved expressed as a percent of ewes one year old and older on hand at beginning of year. See table below for estimates.

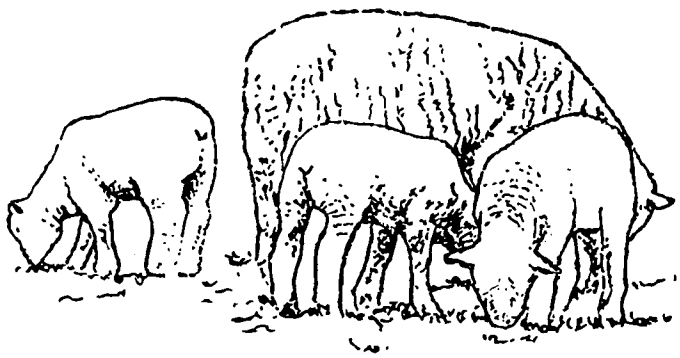
Breeding Sheep and Lambs and Lamb Crop: Inventory by Class, January 1, Utah, 1995-98

Year	Breeding Sheep and Lambs				Lamb Crop 1/	
	Total	Sheep 1 yr old and older		Replacement Lambs	Number	As Percent of Ewes One Year and Older 2/
		Ewes	Rams			
	1,000 Head					Percent
1995	360	310	11	39	340	110
1996	355	305	10	40	325	107
1997	339	290	9	40	310	107
1998	315	265	9	41	3/	3/

1/ Lamb crop defined as lambs marked, docked or branded. 2/ Not strictly a lambing rate. Percent represents lamb crop expressed as a percent of ewes one year old and older on hand at beginning of year. 3/ Estimates published with January 1, 1999 sheep inventory.

Market Sheep and Lambs: Inventory by Weight Group, January 1, Utah, 1995-98

Year	Market Lambs					Market Sheep	Total Market Sheep and Lambs
	Under 65 Lbs	65-84 Lbs	85-104 Lbs	Over 105 Lbs	Total		
	1,000 Head						
1995	1	2	40	27	70	15	85
1996	1	3	11	18	33	7	40
1997	1	3	15	11	30	6	36
1998	1	2	12	13	28	7	35



Sheep & Lambs: Balance Sheet, Utah, 1990-97

Year	Inventory Beginning of Year 1/	Lamb Crop	Inshipments	Marketings 2/		Farm Slaughter 3/	Deaths		Inventory End of Year 1/
				Sheep	Lambs		Sheep	Lambs	
				1,000 Head					
1990	509	430	11	50	328	5	25	34	508
1991	508	400	11	62	305	5	26	33	488
1992	488	400	11	42	297	5	26	39	490
1993	490	350	8	69	277	5	25	32	440
1994	442	360	9	68	242	6	18	32	445
1995	445	340	10	38	312	6	16	28	395
1996	395	325	10	38	264	5	20	28	375
1997	375	310	9	49	251	5	16	23	350

1/ Starting in 1994, beginning and end of year inventories includes new crop lambs. 2/ Includes custom slaughter for use on farms where produced, and State outshipments, but excludes interfarm sales within the State. 3/ Excludes custom slaughter for farmers at commercial establishments.

Sheep & Lambs: Production, Marketings & Income, Utah, 1990-97

Year	Production 1/	Marketings 2/	Price per 100 Pounds		Value of Production	Cash Receipts 3/	Value of Home Consumption	Gross Income
			Sheep	Lambs				
	1,000 Pounds		Dollars		1,000 Dollars			
1990	35,800	36,670	18.70	48.50	15,575	15,550	393	15,943
1991	33,165	36,330	20.40	43.20	12,970	13,574	389	13,963
1992	32,300	32,610	24.30	51.80	15,307	15,159	466	15,625
1993	28,744	35,270	21.50	60.40	15,226	17,219	326	17,545
1994	30,253	31,710	23.60	64.10	17,013	16,195	644	16,839
1995	27,669	33,510	21.00	77.00	19,398	22,611	764	23,375
1996	26,315	29,280	23.90	85.90	20,740	21,618	647	22,265
1997	26,115	29,760	32.70	87.20	20,753	21,945	667	22,612

1/ Adjustments made for changes in inventory and for inshipments. 2/ Excludes custom slaughter for use on farms where produced and interfarm sales within the State. 3/ Receipt from marketings and sale of farm slaughter.

Wool: Production and Value, Utah, 1990-97

Year	Sheep & Lambs Shorn 1/	Weight per Fleece	Shorn Wool Production	Average Price per Pound	Value 2/
	1,000 Head	Pounds	1,000 Pounds	Dollars	1,000 Dollars
1990	464	10.2	4,723	0.72	3,401
1991	456	10.4	4,741	0.51	2,418
1992	440	9.9	4,377	0.78	3,414
1993	405	9.7	3,930	0.57	2,240
1994	384	10.0	3,843	0.70	2,690
1995	364	9.6	3,500	1.01	3,535
1996	336	9.2	3,090	0.65	2,009
1997	308	9.4	2,905	0.75	2,179

1/ Includes shearing at commercial feeding yards. 2/ Production multiplied by annual average price.

Sheep and Lamb Losses by Cause

Utah farmers and ranchers lost 60,700 sheep and lambs to all causes in 1997.

Lambs lost before docking totaled 22,500, **lambs lost after docking** totaled 22,700, and sheep one year old and older lost totaled 15,500. The largest single cause of death in lambs before docking was from coyotes taking 5,000. This accounted for 22.2 percent of all lambs lost before docking. Coyotes also accounted for the largest number of lambs lost after docking at 10,200, a 45.0 percent loss.

Sheep one year old and older losses to coyotes, at 3,800, was the single largest cause, accounting for 24.5 percent. Total losses to coyotes equaled 19,000 which was 31.3 percent of all losses to sheep and lambs in the state. Other loss totals are shown.

Cooperation: Data were collected in conjunction with the National Agricultural Statistics Service January 1 Sheep Report. Utah Department of Agriculture and Food provided funding for the "Loss by Cause" portion of the survey. Much appreciation goes out to all the sheep producers who cooperated in the effort to compile these statistics.

Sheep & Lamb: Loss by Cause, 1996-97

Cause of Loss	Lambs				Sheep				Total 1/			
	Number of head		Value in Dollars 2/		Number of head		Value in Dollars 3/		Number of head		Value in Dollars	
	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
	. . Number . .		. . Thousand . .		. . Number . .		. . Thousand . .		. . Number . .		. . Thousand . .	
PREDATOR												
Dog	900	1,100	81	57	600	700	63	81	1,500	1,800	144	138
Coyote	19,600	15,200	1,764	789	4,300	3,800	452	437	23,900	19,000	2,216	1,226
Eagle	1,500	300	135	16	0	0	0	0	1,500	300	135	16
Bear	1,600	1,100	144	57	1,300	800	137	92	2,900	1,900	281	149
Mtn. Lion	6,500	4,100	585	213	2,000	1,300	210	150	8,500	5,400	795	362
Fox	600	900	54	47	0	0	0	0	600	900	54	47
Bobcat	500	200	45	10	100	100	11	12	600	300	56	22
Other animals	200	400	18	21	100	0	11	0	300	400	29	21
Total Predator	31,400	23,300	2,826	1,210	8,400	6,700	882	771	39,800	30,000	3,708	1,980
NON-PREDATOR												
Weather conditions	3,300	5,000	297	260	1,000	400	105	46	4,300	5,400	402	306
Diseases	4,900	3,700	441	192	1,000	1,100	105	127	5,900	4,800	546	319
Poison	1,100	1,000	99	52	1,500	900	158	104	2,600	1,900	257	155
Lambing complications	4,600	3,200	414	166	1,500	1,300	158	150	6,100	4,500	572	316
Old age	0	0	0	0	2,500	1,500	263	173	2,500	1,500	263	173
Thefts	300	200	27	10	700	100	74	12	1,000	300	101	22
On back	100	0	9	0	400	500	42	58	500	500	51	58
Other causes	700	800	63	42	400	200	42	23	1,100	1,000	105	65
Total Non-predator	15,000	13,900	1,350	722	9,000	6,000	945	690	24,000	19,900	2,295	1,412
UNKNOWN CAUSES												
Total Unknown Causes	7,100	8,000	639	415	2,600	2,800	273	322	9,700	10,800	912	737
TOTAL LOSS												
Total Loss	53,500	45,200	4,815	2,347	20,000	15,500	2,100	1,783	73,500	60,700	6,915	4,130

1/ Totals may not equal due to rounding. 2/ Lamb value equal to market year average price received for lambs multiplied by an average weight of 60 pounds per lamb.
3/ Sheep value equal to average of 1997 and 1998 average value per head.

Sheep & Lamb: Percent of Loss by Cause 1/

Cause of Loss	Lambs				Sheep	
	Before Docking		After Docking			
	1996	1997	1996	1997	1996	1997
	Percent					
PREDATOR						
Dog	1.2	2.2	2.1	2.6	3.0	4.5
Coyote	25.5	22.2	46.8	44.9	21.5	24.5
Eagle	5.1	0.9	0.7	0.4	0.0	0.0
Bear	0.4	0.4	5.4	4.4	6.5	5.2
Mtn. Lion	5.1	4.9	18.6	13.2	10.0	8.4
Fox	2.0	2.2	0.4	1.8	0.0	0.0
Bobcat	1.6	0.4	0.4	0.4	0.5	0.6
Other animals	0.8	0.9	0.0	0.9	0.5	0.0
Total Predator	41.6	34.2	74.3	68.7	42.0	43.2
NON-PREDATOR						
Weather conditions	10.6	18.2	2.1	4.0	5.0	2.6
Diseases	14.1	9.8	4.6	6.6	5.0	7.1
Poison	2.0	0.4	2.1	4.0	7.5	5.8
Lambing	18.0	14.2	0.0	0.0	7.5	8.4
Old age	0.0	0.0	0.0	0.0	12.5	9.7
Thefts	0.4	0.0	0.7	0.9	3.5	0.6
On back	0.0	0.0	0.4	0.0	2.0	3.2
Other causes	1.2	2.7	1.4	0.9	2.0	1.3
Total Non-predator	46.3	45.3	11.4	16.3	45.0	38.7
UNKNOWN CAUSES						
Total Unknown	12.2	20.4	14.3	15.0	13.0	18.1
TOTAL LOSS						
Total Loss	100.0	100.0	100.0	100.0	100.0	100.0

1/ Totals may not equal due to rounding.

Use and Effectiveness of Non-Lethal Sheep Predator Control Measures, Utah, 1997

Non-Lethal Predator Control Measures	Percent of Responses Using and Not Using Practice		Effectiveness Rating of those reporting use of each practice		
	Practice Used	Practice Not Used	Very Effective	Somewhat Effective	Not Effective
			Percent		
One or More Practices Used	37.2	62.8			
Fencing	47.9	52.1	51.3	41.0	7.7
Scaring Devices (fright tactics)	1.7	98.3	0.0	81.6	18.4
Guard Animals	61.4	38.6	69.3	26.9	3.9
Husbandry Practices:					
Herding, Gathering	32.7	67.3	50.3	44.0	5.8
Night Penning	27.1	72.9	67.2	28.7	4.1
Shed Lambing	66.5	33.5	67.9	29.9	2.1
Move Livestock	13.4	86.6	22.8	54.7	22.6

Hogs and Pigs

The Utah hog and pig inventory on December 1, 1997 was 295,000 head, 81 percent above the December 1, 1996 level. This is a new record high hogs and pigs inventory for Utah. The old record was 196,000 set in 1944.

The total pig crop for the year was 465,000 head, 99 percent above 1996. A total of 51,000 sows farrowed during 1997, up 82 percent from 1996. The number of farms with hogs or pigs totaled 500, a decrease of 17 percent from the previous year.

The December 1, 1997 average value per head of Utah's hogs and pigs was $88.00, down $11.00 from the 1996 level. The total inventory value was $26.0 million, up 61 percent from a year earlier.

Cash receipts during the December 1, 1997 through November 30, 1997 period totaled $42.3 million, up 166 percent from 1996. Marketings during 1997 were at 72.0 million pounds, 144 percent above the previous year. Hog prices averaged $58.80 per cwt, up $4.80 from the 1996 average price.

Hogs and Pigs: Farms, Inventory and Value, Utah, 1990-97

Year	Farms with Hogs	Hogs and Pigs on Farms December 1		
		Number	Value	
			Per Head	Total
	Number	1,000 Head	Dollars	1,000 Dollars
1990	900	33	93.00	3,069
1991	900	38	77.00	2,926
1992	900	44	80.00	3,520
1993	800	40	82.00	3,280
1994	800	44	58.00	2,552
1995	700	62	76.00	4,712
1996	600	163	99.00	16,137
1997	500	295	88.00	25,960

Hogs and Pigs: Inventory by Class and Weight Group, Utah, December 1, 1990-97

Year	Total	Breeding	Market	Market Hogs & Pigs by Weight Group			
				Under 60 Lbs	60-119 Lbs	120-179 Lbs	180 Lbs & Over
	1,000 Head						
1990	33	5	28	10	7	5	6
1991	38	5	33	11	8	7	7
1992	44	6	38	14	9	9	6
1993	40	5	35	12	9	8	6
1994	44	14	30	11	8	6	5
1995	62	19	43	13	11	11	8
1996	163	40	123	48	32	30	13
1997	295	55	240	100	42	38	60

Hogs and Pigs: Balance Sheet, Utah, 1990-97

Year	Inventory Beginning of Year 1/	Annual Pig Crop	Inship-ments	Marketings 2/	Farm Slaughter 3/	Deaths	Inventory End of Year 1/
				1,000 Head			
1990	27	52	4	45	1	4	33
1991	33	57	3	49	1	5	38
1992	38	61	6	56	1	4	44
1993	44	59	5	63	1	4	40
1994	40	58	13	61	1	5	44
1995	44	82	15	74	1	4	62
1996	62	234	4	124	1	12	163
1997	163	465	2	301	1	33	295

1/ Hogs and pigs inventory is as of Dec. 1. 2/ Includes custom slaughter for use on farm where produced, State out-shipments, but excludes interfarm sales within the State. 3/ Excludes custom slaughter for farmers at commercial establishments.

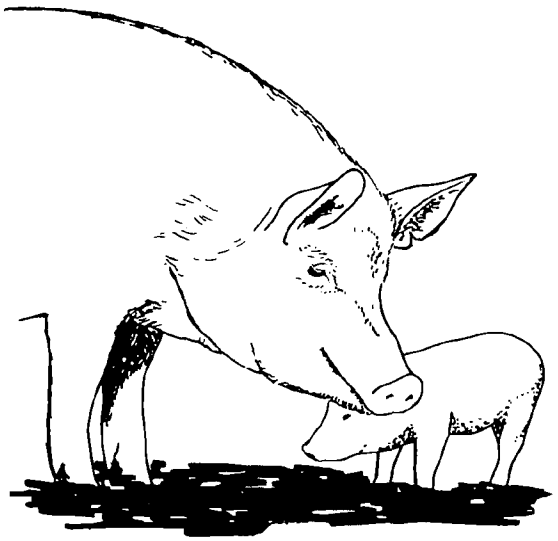
Hogs and Pigs: Production and Income, Utah, 1990-97

Year	Production 1/	Market-ings 2/	Price per 100 Lbs	Value of Production	Cash Receipts 3/	Value of Home Consump-tion	Gross Income
	.... 1,000 Pounds ...		Dollars	..... 1,000 Dollars			
1990	11,706	10,601	48.20	5,619	5,110	212	5,322
1991	12,494	11,520	42.80	5,332	4,931	205	5,136
1992	13,949	13,200	33.60	4,663	4,435	161	4,596
1993	14,590	14,880	38.00	5,508	5,654	182	5,836
1994	16,065	14,400	33.00	5,103	4,752	158	4,910
1995	19,405	16,570	33.80	6,347	5,629	162	5,791
1996	42,765	29,520	54.00	23,051	15,941	259	16,200
1997	90,215	72,000	58.80	53,030	42,336	282	42,618

1/ Adjustments made for inshipments and changes in inventories. 2/ Excludes interfarm sales within the State and custom slaughter for use on farms where produced. 3/ Includes receipts from marketings and from sales of farm slaughtered meat.

Pig Crop: Sows Farrowing and Pigs Saved, Utah, 1990-97

Year	Sows Farrowing	Pigs per Litter	Pigs Saved
	1,000 Head	Head	1,000 Head
1990	7.0	7.45	52.0
1991	7.8	7.30	57.0
1992	8.3	7.35	61.0
1993	8.1	7.30	59.0
1994	8.0	7.25	58.0
1995	10.1	8.10	82.0
1996	28.0	8.36	234.0
1997	51.0	9.12	465.0



Chickens and Eggs

The value of eggs produced in Utah during 1997 totaled $20.9 million, 4 percent below the 1996 level. Total production, at 436 million eggs, was down 6 percent from 1996. The average price of eggs was 57.6 cents per dozen, one cent above 1996.

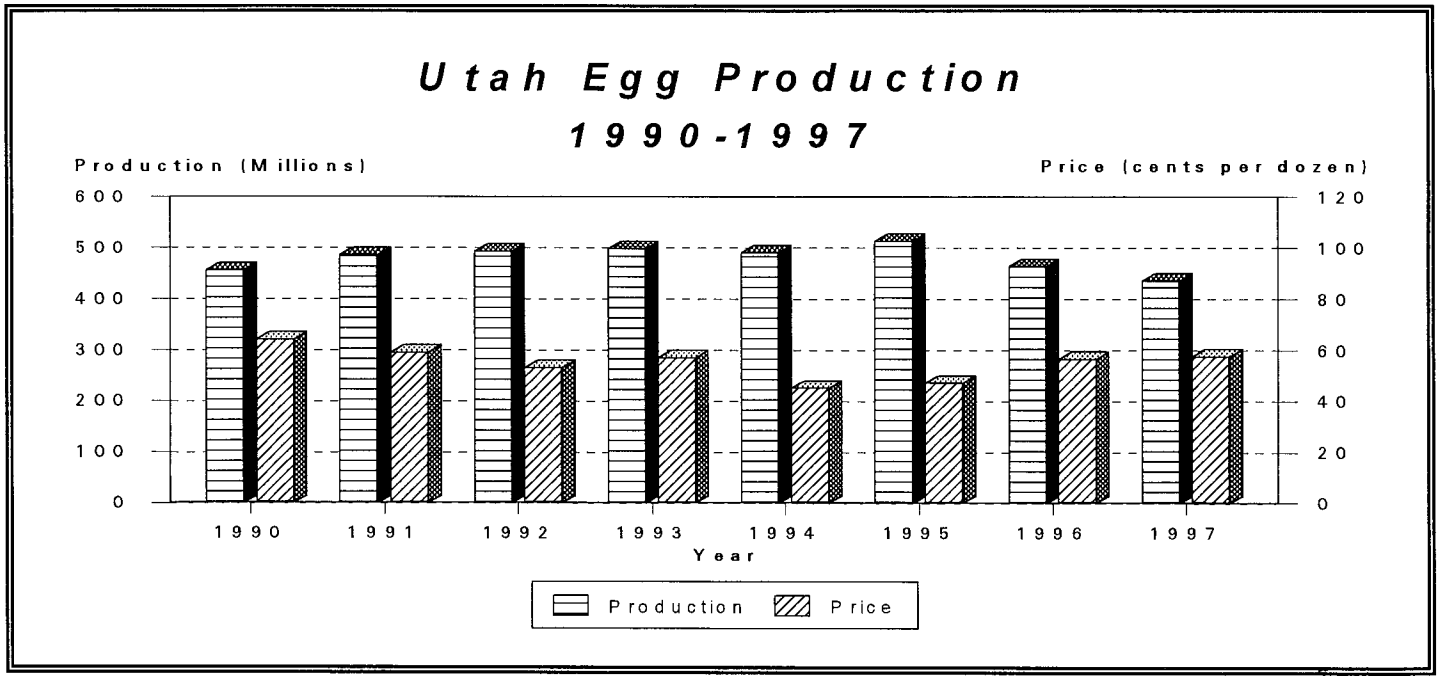
The average number of layers during the year was 1.65 million, 6 percent below the 1996 level. Eggs produced per layer was 265 compared with 266 for 1996. Pounds of chicken sold (primarily cull laying hens) at 4.3 million increased 5 percent from 1996.

The average price per pound of chickens sold was three cents, the same as 1996. The value of chickens sold in 1997 was $128,000, up 5 percent from 1996.

Layers and Eggs: Number, Production and Value of Production, Utah, 1990-97 1/

Year	Average Number of Layers	Eggs per Layer	Total Egg Production	Price per Dozen	Value of Production
	1,000 Head	Number	Millions	Cents	1,000 Dollars
1990	1,817	251	456	64.0	24,320
1991	1,876	259	486	59.0	23,895
1992	1,964	251	493	53.0	21,774
1993	2,001	249	498	57.0	23,655
1994	1,885	260	491	45.1	18,453
1995	1,950	263	513	47.1	20,135
1996	1,746	266	464	56.6	21,885
1997	1,647	265	436	57.6	20,928

1/ Estimates cover the 12 month period, December 1 previous year, through November 30.



Chicken Inventory: Number and Value, Utah, December 1, 1990-97 1/

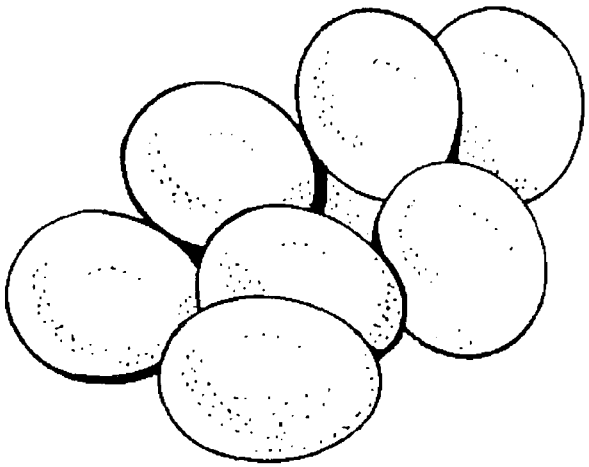
Year	Hens and Pullets of Laying Age	Pullets 3 Months and Over Not Laying	Pullets Under 3 Months	Other Chickens	Total Chickens		
					Number	Value	
						Average	Total
	1,000 Head					Dollars	1,000 Dollars
1990	1,858	273	208	1	2,340	1.90	4,446
1991	1,954	155	183	1	2,293	1.60	3,669
1992	1,958	147	220	1	2,326	1.70	3,954
1993	1,880	187	267	1	2,335	1.40	3,269
1994	2,000	195	179	1	2,375	1.50	3,563
1995	1,710	150	179	1	2,040	1.30	2,652
1996	1,734	141	168	1	2,044	1.50	3,066
1997	1,518	198	151	0	1,867	1.60	2,987

1/ Excludes commercial broilers.

Chickens: Lost, Sold, and Value of Sales, Utah, 1990-97 1/

Year	Number Lost 2/	Number Sold	Pounds Sold	Price per Pound	Value of Sales
	1,000 Head		1,000 Pounds	Cents	1,000 Dollars
1990	160	1,190	4,760	2.1	100
1991	195	1,095	4,380	2.0	88
1992	153	1,200	4,800	2.0	96
1993	168	1,210	4,840	3.0	145
1994	265	1,625	6,500	3.0	195
1995	372	1,298	5,192	2.6	135
1996	327	1,014	4,056	3.0	122
1997	160	1,068	4,272	3.0	128

1/ Estimates exclude broilers and cover the 12 month period December 1 previous year through November 30. 2/ Includes death and other losses during the 12 month period.



Bees and Honey

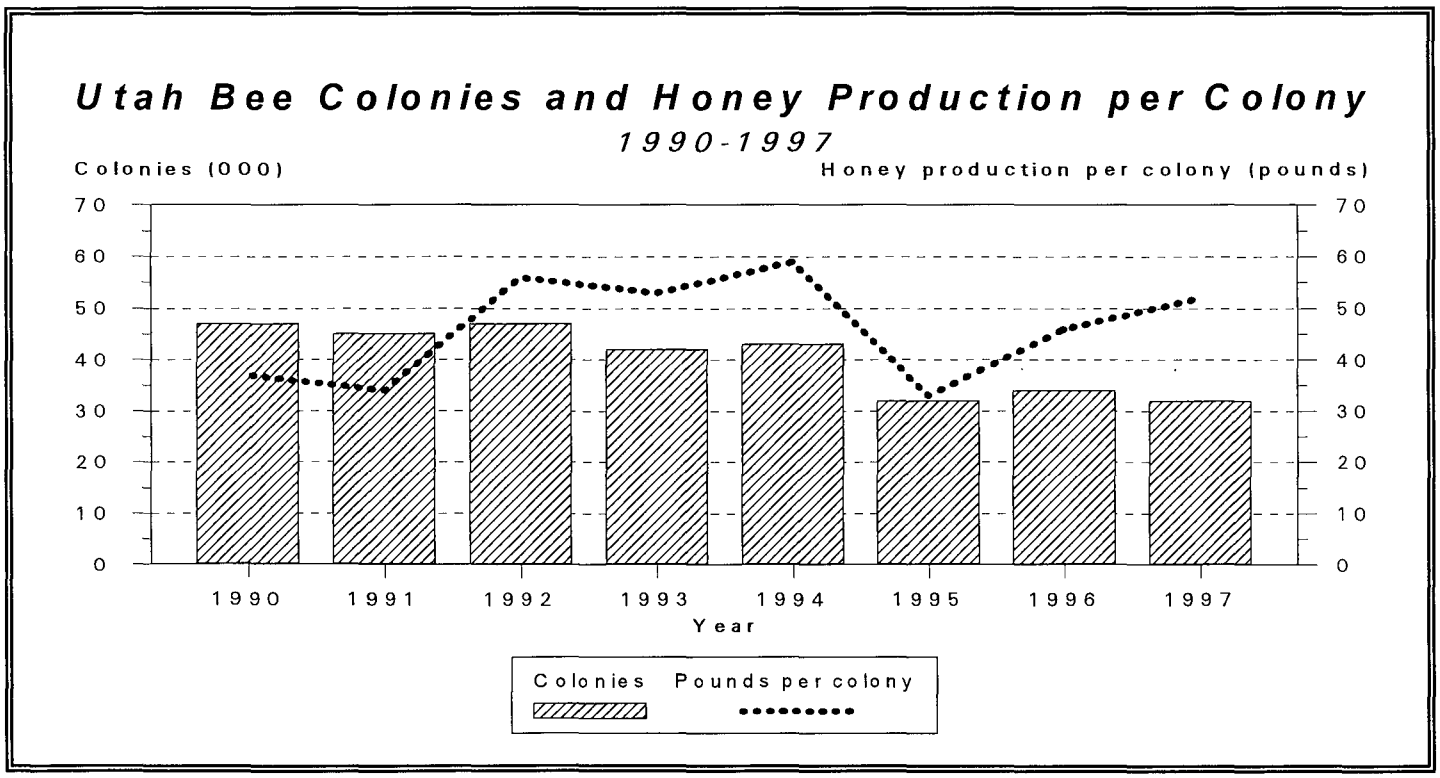
Honey production in Utah from producers with five or more colonies totaled 1.7 million pounds during 1997, up 6 percent from the 1996 level. The number of colonies at 32,000 was down 2,000 from the previous year. Production per colony at 52 pounds was 6 pounds above the level of 1996.

The price received per pound of honey averaged 75 cents, down 10 cents from 1996. The total value of the honey produced in 1997 was $1.2 million, a decrease of 6 percent from 1996.

Several Utah apiaries kept their bees in other States during part of the year. Honey produced in other States was counted in that states production and not included in the Utah production.

Honey: Colonies of Bees, Production, & Value, Utah, 1990-97

Year	Colonies of Bees	Honey			
		Production		Value	
		Per Colony	Total	Per Pound	Total
	1,000	Pounds	1,000 Pounds	Cents	1,000 Dollars
1990	47	37	1,739	56	974
1991	45	34	1,530	55	842
1992	47	56	2,632	58	1,527
1993	42	53	2,226	55	1,224
1994	43	59	2,537	53	1,345
1995	32	33	1,056	65	686
1996	34	46	1,564	85	1,329
1997	32	52	1,664	75	1,248



Mink

Mink pelt production in Utah during 1996 totaled 585,000 pelts, 3 percent above 1995. The number of females bred to produce kits in 1997 was 185,000, up 11 percent from the previous year. Utah ranked second in the nation in mink pelt production in 1996.

Standard was the most common type of pelt produced, accounting for 49 percent of all pelts taken. Mahogany and Demi-Buff accounted for 31 and 9 percent respectively. In 1996 there were 130 mink farms in Utah, the same level as 1995.

Leading mink producing counties were Utah and Morgan, producing over 63 percent of all pelts taken. Other leading counties were Cache, Summit, and Salt Lake.

Mink: Number of Ranches, Pelts Produced, Females Bred, Average Price & Value, Utah and United States, 1990-97

Year	Utah			United States				
	Ranches Producing Pelts	Pelts Produced	Females Bred	Ranches Producing Pelts	Pelts Produced	Females Bred	Average Pelt Price	Value of Pelts
	Number	1,000		Number	1,000		Dollars	Million Dollars
1990	165	680	189	771	3,366	922	25.50	85.8
1991	160	670	180	683	3,268	874	21.90	71.6
1992	150	651	175	571	2,900	782	23.80	69.0
1993	140	600	170	498	2,527	707	34.10	86.2
1994	130	530	165	458	2,525	713	33.00	83.3
1995	130	570	162	445	2,689	710	53.10	142.8
1996	130	585	167	415	2,649	678	35.30	93.5
1997	1/	1/	185	1/	1/	711	1/	1/

1/ Data available July 23, 1998.

Mink: Pelts Produced in 1996 and Females Bred for 1997, Utah and United States

Type	Pelts Produced 1996		Females Bred To Produce Kits 1997	
	Utah	United States	Utah	UnitedStates
	Thousand			
Standard	286.0	1,237.6	91.9	330.8
Ranch Wild	11.0	195.1	2.4	47.5
Demi-Buff 1/	50.0	109.4	15.0	29.8
Pastel	3.0	32.3	0.9	13.4
Pale Brown		1.2		0.2
Sapphire	18.0	85.5	6.1	32.0
Gunmetal	28.0	338.7	9.3	90.7
Mahogany	183.0	560.1	56.3	138.8
Pearl	5.0	25.4	0.2	5.7
Lavender Hope		9.4		2.1
Pink		3.0		1.4
Violet Type	1.0	18.5	2.0	8.5
White		29.5	0.9	9.2
Miscellaneous		3.4		0.7
Total	585.0	2,649.1	185.0	710.8

1/ This color class includes Demi-Buff, Dark Brown, Violet, Pastel, Standard, Pearl crosses, and others.

Trout

Utah trout sales from September 1, 1996 to August 31, 1997 totaled 2.30 million dollars, down 7 percent from the previous year. The number of operations with trout, at 17, was one operation less than September 1, 1996 to September 1, 1997. Trout losses totaled 249,000 fish in 1997, down 26 percent from 1996. Predators accounted for 53 percent of the losses.

Trout: Number of Operations, Total Sales, and Foodsize Sales, Utah, 1990-97

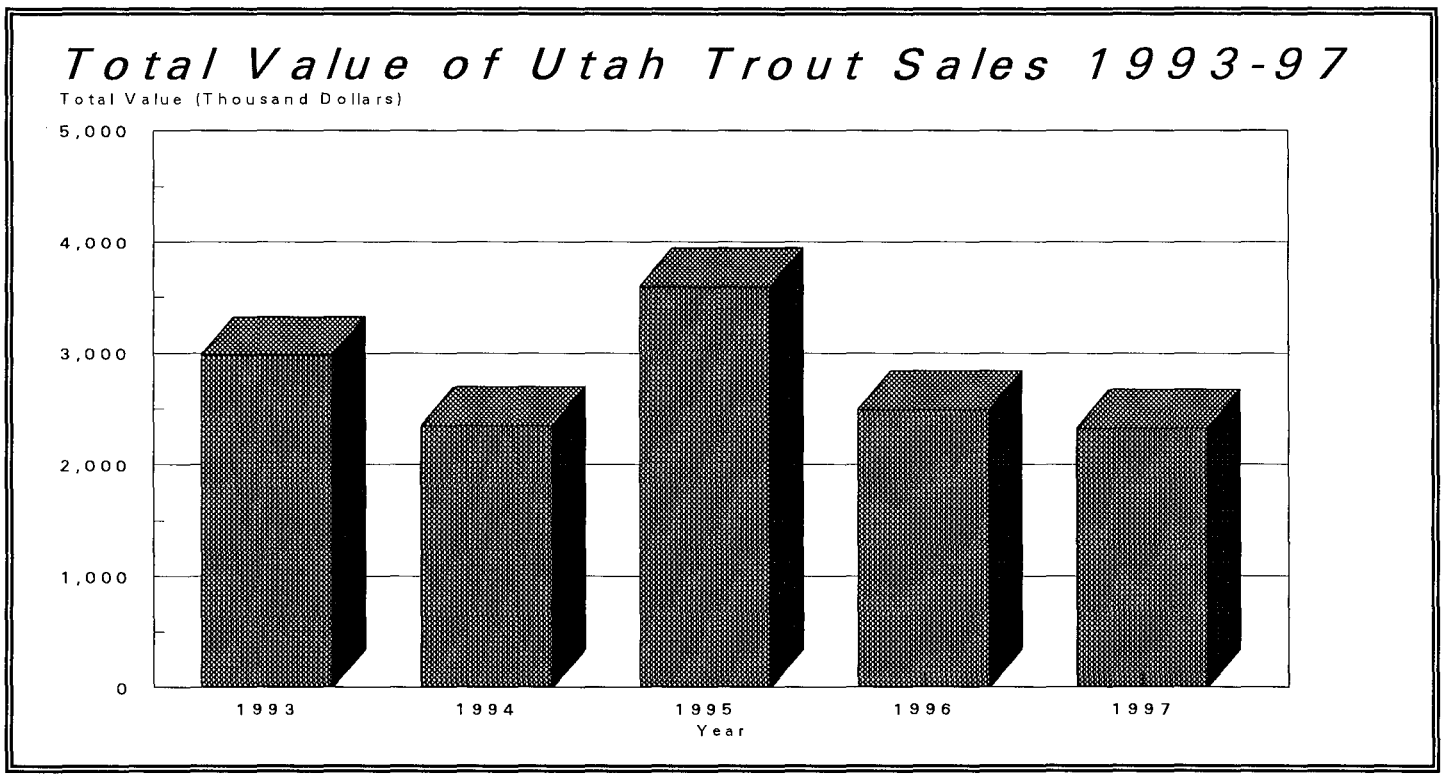
Year	Number of Operations Sep 1	Total Value of Sales 1/ Sep1-Aug 31	Foodsize Trout Sales 2/			
			Number Sold	Pounds Sold	Value of Sales	Average Value per Pound
	Number	1,000 Dollars	Thousand		1,000 Dollars	Dollars
1990	8	3,512	3,391	2,643	3,478	1.32
1991	7	1,959	3/	3/	3/	3/
1992	3/	3/	3/	3/	3/	3/
1993	9	2,980	1,680	1,869	2,739	1.47
1994	12	2,348	1,248	1,261	2,118	1.68
1995	18	3,596	1,586	1,792	3,230	1.80
1996	18	2,489	1,144	1,205	2,077	1.72
1997	17	2,325	556	871	1,816	2.08

1/ Total value of sales for 1989 does not include value of fingerling sales. 2/ Food size fish are defined as over 12 inches in length. 3/ Data not published to avoid disclosure of individual operations.

Trout: Stocker Sales and Fingerling Sales, Utah, 1993-97 1/

Year	Stocker Size Trout Sales 2/				Fingerling Size Trout Sales 3/			
	Number Sold	Pounds Sold	Value of Sales	Average Value per Pound	Number Sold	Pounds Sold	Value of Sales	Average Value per Pound
	1,000		1,000 Dollars	Dollars	1,000		1,000 Dollars	Dollars
1993	176	132	225	1.70	24	1	5	5.00
1994	233	135	227	1.68	20	1	3	3.00
1995	285	179	346	1.93	70	4	20	5.00
1996	336	231	402	1.74	31	2	10	5.00
1997	543	279	487	1.75	73	4	22	5.50

1/ Years prior to 1993 not available. 2/ Stockers are 6-12 inches long. 3/ Fingerlings are 1-6 inches long.



Trout: Loss by Cause, Utah, Sep 1-Aug 31; 1993-97

Year	Total		Disease			Theft			Chemicals		
	Number Lost	Pounds Lost	Number Lost	Pounds Lost	% of Total	Number Lost	Pounds Lost	% of Total	Number Lost	Pounds Lost	% of Total
	1,000				Percent	1,000		Percent	1,000		Percent
1993	216	137	38	21	18	6	7	3	0	0	0
1994	384	119	56	17	15	20	35	5	0	0	0
1995	258	131	0	0	0	16	16	6	67	30	26
1996	336	143	20	1	6	12	11	3	0	0	0
1997	249	97	0	0	0	36	22	14	45	20	18

Trout: Loss by Cause, Utah, Sep 1-Aug 31; 1993-97

Year	Drought			Flood			Predators			Other		
	Number Lost	Pounds Lost	% of Total	Number Lost	Pounds Lost	% of Total	Number Lost	Pounds Lost	% of Total	Number Lost	Pounds Lost	% of Total
	1,000		Percent	1,000		Percent	1,000		Percent	1,000		Percent
1993	63	33	29	15	9	7	84	59	39	10	8	5
1994	0	0	0	1	1	0	306	64	80	1	2	0
1995	9	6	3	5	2	2	109	31	42	52	46	20
1996	0	0	0	0	0	0	251	109	75	53	22	16
1997	0	0	0	8	3	3	133	43	53	27	9	11

Farm Labor

The Utah Agricultural Statistics Service conducts quarterly agricultural labor surveys in January, April, July, and October. Data concerning hired labor, hours worked, and wage rates for the week (Sunday through Saturday) containing the 12th of the month are collected. Utah is not published separately but combined with Colorado and Nevada to form the Mountain II region.

The number of hired farm workers in the Mountain II region during the July 1997 through April 1998 quarterly survey periods peaked in July 1997 at 30,000 workers, followed by October 1997 with 26,000 workers and April 1998 with 19,000. A low of 14,000 workers was reported in January 1998.

July 1997 was the busiest quarter with hired workers averaging 49.5 hours for the week followed by October 1997 with 40.3 hours and April 1998 with 39.9 hours. Again, January 1998 was the low with the hired labor working 35.8 hours for the week.

The average wage rates were generally higher during the January 1998 survey period where the average rate for all hired workers was $7.65 per hour. Field workers received their highest wage rates in January 1998 at $7.22 per hour and their lowest at $5.88 in July 1997. Livestock workers received their highest wages in October 1997 at $7.23 per hour and their lowest in July 1997 at $6.69 per hour.

Hired Farm Labor: Mountain II Region, July 1997, October 1997, January 1998, and April 1998 1/ 2/

	July 6-12, 1997	October 12-18, 1997	January 11-17, 1998	April 12-18, 1998
	1,000 Employees			
Hired Workers Expected to be Employed	30	26	14	19
150 days or more	21	21	12	14
149 days or less	9	5	2	5
	Dollars per Hour			
Wage Rates for All Hired Workers 2/	6.33	7.25	7.65	7.46
Type of Worker				
Field	5.88	6.74	7.22	6.80
Livestock	6.69		6.89	7.12
Field & Livestock combined	6.00	6.85	7.00	6.95
	Hours per Week			
Hours Worked by Hired Workers	49.5	40.3	35.8	39.9

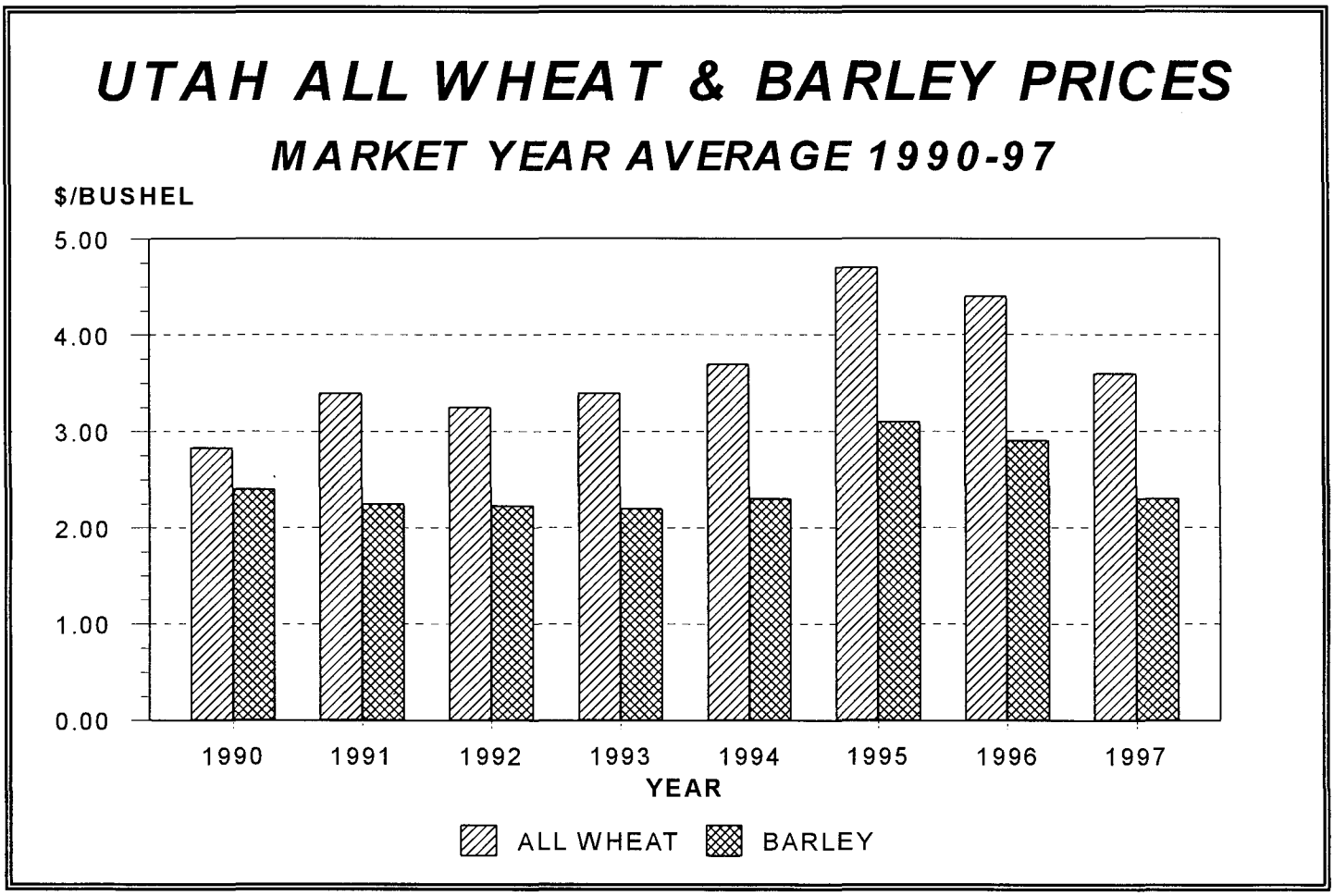
1/ Mountain II Region includes Colorado, Nevada, and Utah. 2/ Excludes Agricultural Service Workers.

Agricultural Prices

The National Agricultural Statistics Service (NASS), also known as the Utah Agricultural Statistics Service at the state level, estimates the prices that farmers and ranchers receive for their commodities and the prices that they pay for production goods and services. These prices and associated price indexes are an important barometer of agricultural markets, the economic well-being of farmers, and changes in production costs. NASS also issues monthly parity prices. Price and parity data are important parts of formulas used to determine support prices and government payments to farmers.

Sheep and lamb market year average prices for 1997 were higher than the 1996 levels. Milk prices were below the previous year's prices but above 1995. The market year average alfalfa hay price for 1997 was higher than the 1996 price.

Prices for many of Utah agricultural commodities are published only on marketing year (12 month period varies by commodity) basis. These market year prices can be found in individual commodity tables within this publication.



Average Prices Received: by Farmers, Utah, 1990-97

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mktg Year Avg 1/
BARLEY (Dollars per Bushel)													
1990	2.30	2.35	2.38	2.40	2.46	2.45	2.28	2.29	2.33	2.49	2.47	2.35	2.40
1991	2.46	2.54	2.47	2.46	2.50	2.50	2.14	2.11	2.16	2.19	2.33	2.35	2.25
1992	2.40	2.39	2.39	2.42	2.49	2.48	2.23	2.18	2.19	2.24	2.21	2.26	2.23
1993	2.26	2.25	2.32	2.27	2.26	2.30	2.20	2.11	2.10	2.09	2.23	2.35	2.22
1994	2.43	2.40	2.47	2.38	2.35	2.40	2.32	2.17	2.22	2.22	2.22	2.35	2.32
1995	2.34	2.37	2.41	2.39	2.54	2.76	2.65	2.60	2.74	2.92	3.21	3.22	3.08
1996	3.26	3.32	3.49	3.37	3.84	3.73	3.25	2.98	3.08	3.05	2.96	2.60	2.93
1997	2.63	2.59	2.69	2.74	2.74	2.57	2.36	2.25	2.26	2.33	2.38	2.38	2/ 2.30
ALFALFA & ALFALFA HAY MIXTURES, BALED (Dollars per Ton)													
1990	85.00	85.00	86.00	86.00	85.00	86.00	86.00	85.00	80.00	85.00	86.00	84.00	83.00
1991	84.00	74.00	69.00	69.00	66.00	64.00	61.00	59.00	59.00	55.00	52.00	53.00	57.00
1992	55.00	53.00	54.00	54.00	55.00	61.00	64.00	64.00	62.00	61.00	61.00	61.00	62.00
1993	60.00	61.00	66.00	67.00	70.00	71.00	62.00	63.00	62.00	63.00	65.00	68.00	65.50
1994	70.00	65.00	67.00	67.00	67.00	77.00	77.00	78.00	81.00	76.00	83.00	87.00	80.00
1995	83.00	85.00	83.00	80.00	75.00	75.00	74.00	69.00	67.00	61.00	63.00	63.00	66.00
1996	61.00	59.00	60.00	57.00	59.00	57.00	73.00	74.00	68.00	67.00	73.00	78.00	72.50
1997	83.00	83.00	84.00	83.00	88.00	85.00	90.00	85.00	84.00	85.00	86.00	85.00	2/ 85.50
ALL HAY, BALED (Dollars per Ton)													
1990	83.00	83.00	83.00	83.00	84.00	84.00	84.00	83.00	79.00	83.00	83.00	82.00	81.50
1991	82.00	72.00	67.00	67.00	65.00	63.00	60.00	58.00	58.00	54.00	51.00	52.00	56.00
1992	54.00	52.00	53.00	53.00	54.00	60.00	62.00	62.00	60.00	60.00	60.00	60.00	61.00
1993	59.00	60.00	65.00	65.00	70.00	71.00	62.00	62.00	62.00	63.00	65.00	67.00	65.00
1994	69.00	64.00	66.00	67.00	67.00	77.00	77.00	77.00	80.00	76.00	82.00	86.00	79.50
1995	82.00	84.00	83.00	80.00	75.00	75.00	74.00	68.00	67.00	61.00	63.00	62.00	66.00
1996	60.00	58.00	59.00	57.00	59.00	57.00	72.00	72.00	68.00	67.00	72.00	77.00	72.00
1997	82.00	82.00	83.00	83.00	88.00	85.00	89.00	84.00	84.00	85.00	86.00	85.00	2/ 85.50
SHEEP (Dollars per Cwt)													
1990	27.10	22.00	19.40	16.50	13.50	15.40	22.40	22.40	18.30	17.50	16.30	19.90	18.70
1991	21.70	19.30	21.40	22.80	16.90	17.30	22.60	20.50	22.80	19.30	21.60	23.10	20.40
1992	27.80	29.80	32.60	31.30	20.20	19.20	23.60	27.10	21.60	19.60	18.60	26.20	24.30
1993	25.60	25.00	22.00	19.00	20.00	21.00	23.00	23.00	21.00	18.00	21.50	24.50	21.50
1994	24.00	28.00	26.00	23.00	20.00	26.00	26.00	24.00	24.00	19.00	25.00	29.00	23.60
1995	23.00	28.00	24.00	22.00	19.00	21.00	24.00	22.00	21.00	17.00	19.00	22.00	21.00
1996	28.00	26.00	28.00	22.00	19.00	20.00	26.00	24.00	25.00	22.00	26.00	29.00	23.90
1997	35.00	35.00	34.00	34.00	30.00	33.00	37.00	33.00	29.00	30.00	35.00	36.00	32.70
LAMBS (Dollars per Cwt)													
1990	53.00	52.70	55.90	51.30	46.60	47.30	48.80	46.00	49.40	47.40	41.20	44.20	48.50
1991	41.20	39.80	40.90	42.30	45.10	45.50	48.00	45.60	42.40	42.70	40.30	43.80	43.20
1992	49.70	49.60	56.60	60.30	50.80	54.40	53.30	44.90	51.00	54.00	49.40	53.70	51.80
1993	59.60	66.00	63.00	56.00	55.00	50.00	50.00	59.00	62.00	59.00	60.50	60.00	60.40
1994	55.00	59.00	56.00	56.00	52.00	59.00	66.00	66.00	65.00	64.00	66.00	67.00	64.10
1995	65.00	73.00	75.00	75.00	80.00	83.00	81.00	83.00	80.00	71.00	73.00	73.00	77.00
1996	75.00	83.00	84.00	93.00	91.00	104.00	90.00	86.00	88.00	82.00	83.00	89.00	85.90
1997	95.00	95.00	103.00	100.00	96.00	88.00	83.00	92.00	86.00	86.00	81.00	83.00	87.20

1/ Marketing year, barley, July 1 to June 30; hay, May 1 to April 30; sheep and lamb, January 1 to Dec 31. 2/ Preliminary, final market year average will be published two months after the end of the marketing year.

Average Prices Received: by Farmers, Utah, 1990-97

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mktg Year Avg
MILK, ALL (Dollars per Cwt)													
1990	14.90	13.80	13.10	12.60	12.70	13.00	13.20	13.50	13.40	12.00	11.80	10.90	12.90
1991	11.00	10.80	10.60	10.40	10.50	10.60	11.10	11.60	12.20	12.70	13.10	13.00	11.50
1992	12.60	12.10	11.70	11.70	11.80	12.30	12.50	12.60	12.90	12.60	12.40	11.90	12.30
1993	11.70	11.50	11.30	11.80	12.10	12.30	12.10	11.80	12.10	12.50	13.20	13.10	12.10
1994	13.20	13.00	13.00	13.10	12.20	12.00	11.50	11.80	12.30	12.50	12.60	12.20	12.40
1995	12.00	12.00	12.00	11.70	11.70	11.50	11.50	11.70	12.00	12.80	13.30	13.30	12.10
1996	13.30	13.30	13.10	13.30	13.70	13.60	14.40	14.90	15.60	15.20	14.00	13.00	14.00
1997	12.20	12.60	12.60	12.20	11.60	11.10	11.20	11.90	12.40	13.10	13.40	13.90	12.30
MILK, ELIGIBLE FOR FLUID MARKET (Dollars per Cwt) 1/													
1990	15.30	14.40	13.50	12.80	12.90	13.20	13.40	13.80	13.70	12.50	12.10	11.10	13.20
1991	11.20	11.00	10.70	10.50	10.60	10.70	11.20	11.70	12.30	12.80	13.20	13.20	11.60
1992	12.90	12.30	11.90	11.80	12.00	12.40	12.60	12.90	13.10	12.80	12.50	12.10	12.40
1993	11.80	11.60	11.40	11.90	12.20	12.40	12.20	11.90	12.20	12.60	13.30	13.10	12.20
1994	13.20	13.10	13.10	13.20	12.40	12.20	11.60	12.00	12.30	12.60	12.60	12.20	12.50
1995	12.00	12.00	12.10	11.80	11.80	11.60	11.60	11.80	12.10	12.90	13.30	13.30	12.20
1996	13.40	13.30	13.20	13.40	13.80	13.70	14.50	15.00	15.70	15.30	14.00	13.20	14.10
1997	12.30	12.60	12.70	12.30	11.80	11.20	11.30	12.00	12.40	13.20	13.40	13.90	12.40
MILK, MANUFACTURING GRADE (Dollars per Cwt)													
1990	13.20	11.50	11.60	11.50	11.80	12.10	12.20	12.30	12.10	10.30	10.30	10.00	11.60
1991	10.00	9.75	9.70	9.55	9.75	9.85	10.60	11.10	11.60	12.10	12.40	11.90	10.70
1992	11.00	10.60	10.60	10.90	11.20	11.70	11.70	11.50	11.70	11.60	11.60	11.10	11.30
1993	11.00	10.80	10.90	11.70	11.90	11.70	11.00	10.90	11.60	12.00	12.80	12.70	11.50
1994	12.30	12.30	12.30	12.20	11.20	10.30	10.50	10.80	11.80	12.10	12.20	11.90	11.70
1995	11.80	11.70	11.50	11.00	10.80	10.80	10.80	11.20	11.70	12.40	13.20	13.10	11.60
1996	12.90	12.90	12.50	12.90	13.00	13.10	13.60	14.30	15.20	14.70	13.20	11.80	13.30
1997	11.80	12.20	12.10	11.40	10.50	10.30	10.50	11.40	12.10	12.70	13.10	13.50	11.70

1/ Includes surplus diverted to manufacturing.

Average Prices Received: by Farmers, Milk Cows, Utah, 1990-97

Year	Jan	Apr	Jul	Oct	Marketing Year Average
			Dollars per Head		
1990	1,070	1,140	1,190	1,250	1,160
1991	1,040	1,090	1,100	1,070	1,080
1992	1,070	1,190	1,200	1,140	1,150
1993	1,100	1,130	1,180	1,180	1,150
1994	1,100	1,170	1,220	1,170	1,170
1995	1,100	1,130	1,130	1,070	1,110
1996	1,000	1,040	1,080	1,170	1,070
1997	1,090	1,110	1,120	1,150	1,120

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County Estimates

County estimates are an integral part of agricultural statistics. These estimates provide data to compare acres, production, and yield in different counties within the State of Utah. Crop county estimates play a major role in Federal Farm Program payments and crop insurance settlements, thus, directly effecting many farmers and ranchers. A cooperative agreement between the Utah Department of Agriculture and Food and the Utah Agricultural Statistics Service, USDA provides funding in support of county estimates contained in this publication.

Box Elder was the "Number one" county in **total grain** production (wheat, barley, oats, and corn) followed by Cache, Utah, Millard, and San Juan Counties. Box Elder was also "number one" in acres of grain planted followed by Cache, Utah, San Juan, and Millard Counties.

Box Elder County was the State's largest producer of **winter wheat** producing 46 percent of the State total. Cache County ranked second followed by San Juan, Utah, and Salt Lake Counties.

Spring wheat production was also dominated by Box Elder County followed by Cache, Millard, Utah, and Davis Counties.

Barley production was led by Cache County followed by Millard, Box Elder, Utah, and Sanpete Counties. The top five counties' production accounted for 68 percent of the State total.

Box Elder was the "Number one" producer of **oats** in the State followed by Millard, Cache, Sevier, and Duchesne Counties.

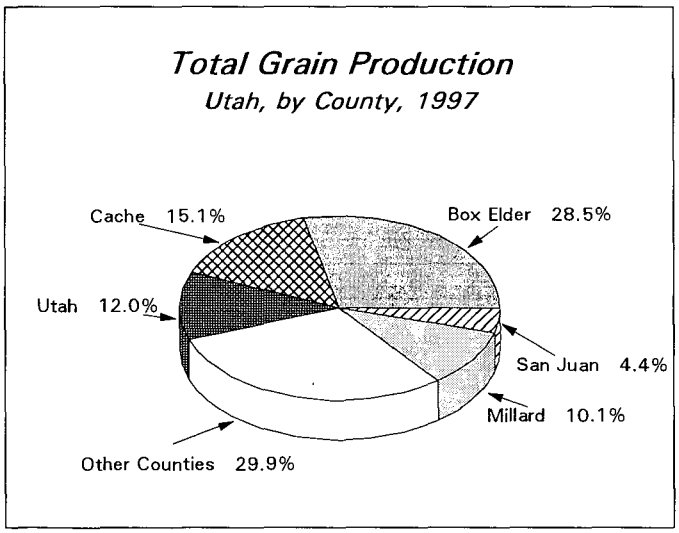
Corn for grain production was led by Box Elder followed by Utah, Millard, Davis, and Weber Counties. Utah County led in production of **corn silage** followed by Sevier, Cache, and Box Elder Counties.

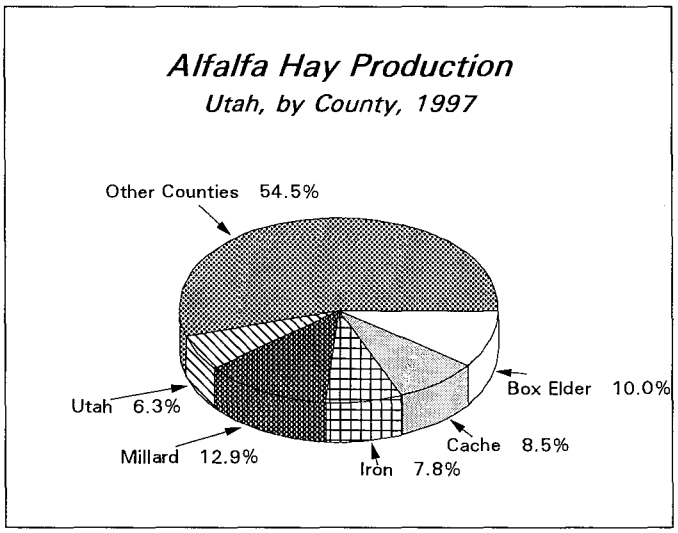
Alfalfa hay production was led by Millard County followed by Box Elder, Cache, Iron, and Utah Counties. Rich was the leading county in **other hay** production followed by Duchesne, Sanpete, Utah, Box Elder, and Cache.

Box Elder County had the largest inventory of **cattle and calves** as of January 1, 1997 followed by Cache, Duchesne, Millard, Sevier, and Utah. Cache County continued as the major county for **milk cows** with over twice the number as Box Elder which ranked in second place. Millard, Utah, Sanpete, and Weber were also major dairy counties.

Sanpete was once again the "Number one" **sheep** county. Other major sheep producing counties were Utah, Iron, Box Elder, and Summit. The top five counties accounted for 59 percent of the total.

Preliminary indications of 1996 total **cash receipts** show Cache County as the "Number one" county. Utah is second, followed by Box Elder, Sanpete, and Millard. Cache was the leading county for livestock cash receipts followed by Sanpete. Crops cash receipts were topped by Box Elder County followed by Utah County.





County Estimates: by County, Selected Items and Years, Utah

Item	Unit	State	County					
			Beaver	Box Elder	Cache	Carbon	Daggett	Davis
1997 PRODUCTION								
All Wheat	Bu	9,174,000	1/	3,897,000	1,333,000	1/		225,000
All Barley	Bu	8,170,000	69,000	1,047,000	1,700,000	1/		140,000
Corn for Grain	Bu	3,105,000		1,000,000	98,000	30,000		270,000
Corn for Silage	Tons	1,032,000	31,000	119,000	151,000	4,000		32,000
Oats	Bu	666,000	16,000	84,000	48,000	21,000		17,000
All Hay	Tons	2,685,000	123,000	253,000	218,000	22,000	16,000	47,000
Alfalfa & Alfalfa Mix Hay	Tons	2,344,000	114,000	235,000	200,000	20,500	10,000	39,000
JANUARY 1, 1998 INVENTORY								
All Cattle & Calves	Head	870,000	42,000	103,000	75,000	9,000	3,000	14,000
Beef Cows	Head	340,000	13,000	28,000	10,000	5,000	3,000	7,000
Milk Cows	Head	90,000	3,500	10,000	22,000			1,500
Breeding Sheep & Lambs	Head	315,000	500	30,000	3,000	4,500	500	10,000
CASH RECEIPTS, 1996								
Livestock & Livestock Products	Mill $	646.1	24.7	55.8	86.2	4.2	0.9	14.5
Crops	Mill $	227.0	4.3	39.4	22.1	0.8	0.4	22.2
Total	Mill $	873.1	29.0	95.2	108.3	5.0	1.3	36.7
1992 CENSUS OF AGRICULTURE								
Number of Farms	Num	13,520	215	1,085	1,189	182	29	582
Land in Farms	Acres	9,624,463	192,288	1,449,976	267,924	291,860	21,958	50,357
Harvested Cropland 2/	Acres	1,043,347	27,149	171,708	120,044	5,592	3,544	18,573
Irrigated Land 3/	Acres	1,142,514	33,519	120,583	87,475	7,895	6,891	20,965

Item	Unit	County						
		Duchesne	Emery	Garfield	Grand	Iron	Juab	Kane
1997 PRODUCTION								
All Wheat	Bu	64,000	1/		1/	38,000	311,000	1/
All Barley	Bu	313,000	1/	1/		205,000	140,000	1/
Corn for Grain	Bu	115,000	55,000				28,000	
Corn for Silage	Tons	31,000	26,000			19,000	7,000	
Oats	Bu	40,000	30,000	12,000		36,000	7,000	8,000
All Hay	Tons	184,000	61,000	42,000	7,000	192,000	69,000	13,000
Alfalfa & Alfalfa Mix Hay	Tons	146,000	54,000	35,000	6,500	182,000	65,000	12,000
JANUARY 1, 1998 INVENTORY								
All Cattle & Calves	Head	64,000	31,000	17,000	3,000	19,000	9,000	10,000
Beef Cows	Head	33,000	13,500	12,500	1,000	8,500	4,500	7,000
Milk Cows	Head	3,500	1,000	500		2,000	500	
Breeding Sheep & Lambs	Head	7,000	4,000	2,000		33,000	4,000	1,500
CASH RECEIPTS, 1996								
Livestock & Livestock Products	Mill $	29.5	11.0	7.0	1.5	12.1	5.1	3.9
Crops	Mill $	6.5	2.0	1.2	0.5	10.8	4.6	0.5
Total	Mill $	36.0	13.0	8.2	2.0	22.9	9.7	4.4
1992 CENSUS OF AGRICULTURE								
Number of Farms	Num	733	420	249	88	365	203	136
Land in Farms	Acres	399,011	240,535	137,530	63,116	434,183	332,686	209,819
Harvested Cropland 2/	Acres	57,788	18,787	16,819	2,355	48,916	25,270	3,337
Irrigated Land 3/	Acres	117,280	31,669	29,231	3,096	51,857	20,097	4,999

1/ Less than 500 acres harvested. 2/ Includes land from which crops were harvested or hay was cut, and land in orchards. 3/ Includes all land watered by any artificial or controlled means, such as sprinklers, furrows or ditches, and spreader dikes.

County Estimates: by County, Selected Items and Years, Utah (continued)

Item	Unit	County							
		Millard	Morgan	Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier
1997 PRODUCTION									
All Wheat	Bu	400,000	56,000		71,000	329,000	901,000	77,000	39,000
All Barley	Bu	1,280,000	199,000	1/	98,000	145,000	1/	505,000	480,000
Corn for Grain	Bu	399,000				130,000			60,000
Corn for Silage	Tons	58,000	1/	1/		9,000	17,000	48,000	163,000
Oats	Bu	54,000	10,000	16,000	24,000	9,000	21,000	32,000	42,000
All Hay	Tons	316,000	30,000	29,000	105,000	54,000	13,000	167,000	115,000
Alfalfa & Alfalfa Mix Hay	Tons	302,000	25,000	25,000	31,000	51,000	12,000	145,000	104,000
JANUARY 1, 1998 INVENTORY									
All Cattle & Calves	Head	60,000	9,000	8,000	45,000	17,000	18,000	47,000	55,000
Beef Cows	Head	19,000	4,500	3,500	31,000	5,500	11,000	12,500	15,000
Milk Cows	Head	8,500	1,500	2,000		2,000	500	6,000	5,000
Breeding Sheep & Lambs	Head	2,000	6,000	3,000	8,000	19,000	3,000	62,000	10,000
CASH RECEIPTS, 1996									
Livestock & Lvst Products	Mill $	35.8	12.3	8.2	16.6	37.9	7.8	74.3	31.0
Crops	Mill $	24.2	1.7	1.1	3.6	11.8	2.0	6.7	5.4
Total	Mill $	60.0	14.0	9.3	20.2	49.7	9.8	81.0	36.4
1992 CENSUS OF AGRICULTURE									
Number of Farms	Num	612	258	109	143	686	206	696	406
Land in Farms	Acres	484,156	234,576	58,522	493,073	107,663	324,921	447,463	158,189
Harvested Cropland 2/	Acres	86,933	9,474	10,923	45,631	26,308	48,031	49,073	31,129
Irrigated Land 3/	Acres	88,841	7,960	13,789	56,389	16,299	5,491	99,061	43,919

Item	Unit	County							
		Summit	Tooele	Uintah	Utah	Wasatch	Washington	Wayne	Weber
1997 PRODUCTION									
All Wheat	Bu	1/	171,000	79,000	832,000	1/	11,000	1/	283,000
All Barley	Bu	1/	211,000	76,000	1,045,000	63,000	60,000	90,000	180,000
Corn for Grain	Bu			105,000	630,000				185,000
Corn for Silage	Tons	1/	1/	29,000	165,000	1/	1/	1/	96,000
Oats	Bu	9,000	7,000	36,000	36,000	9,000	8,000	16,000	18,000
All Hay	Tons	40,000	63,000	130,000	169,000	34,000	57,000	42,000	74,000
Alfalfa & Alfalfa Mix Hay	Tons	23,000	57,000	117,000	147,000	30,000	51,000	37,000	68,000
JANUARY 1, 1998 INVENTORY									
All Cattle & Calves	Head	15,000	22,000	48,000	54,000	9,000	16,000	18,000	30,000
Beef Cows	Head	9,000	13,000	19,500	20,000	2,000	10,500	10,000	8,000
Milk Cows	Head	1,500		1,500	8,000	2,000		1,000	6,000
Breeding Sheep & Lambs	Head	22,000	6,000	13,000	39,000	11,000	1,000	6,000	4,000
CASH RECEIPTS, 1996									
Livestock & Lvst Products	Mill $	14.5	8.2	17.3	70.2	9.4	6.9	11.0	28.3
Crops	Mill $	1.2	3.7	4.9	30.8	1.6	4.0	1.8	7.2
Total	Mill $	15.7	11.9	22.2	101.0	11.0	10.9	12.8	35.5
1992 CENSUS OF AGRICULTURE									
Number of Farms	Num	419	300	716	1,696	274	389	189	945
Land in Farms	Acres	373,582	437,238	1,294,703	450,315	139,347	167,374	105,576	256,522
Harvested Cropland 2/	Acres	17,217	13,882	42,273	83,047	10,130	8,515	13,039	27,860
Irrigated Land 3/	Acres	29,417	16,479	70,011	83,601	15,000	11,987	16,955	31,758

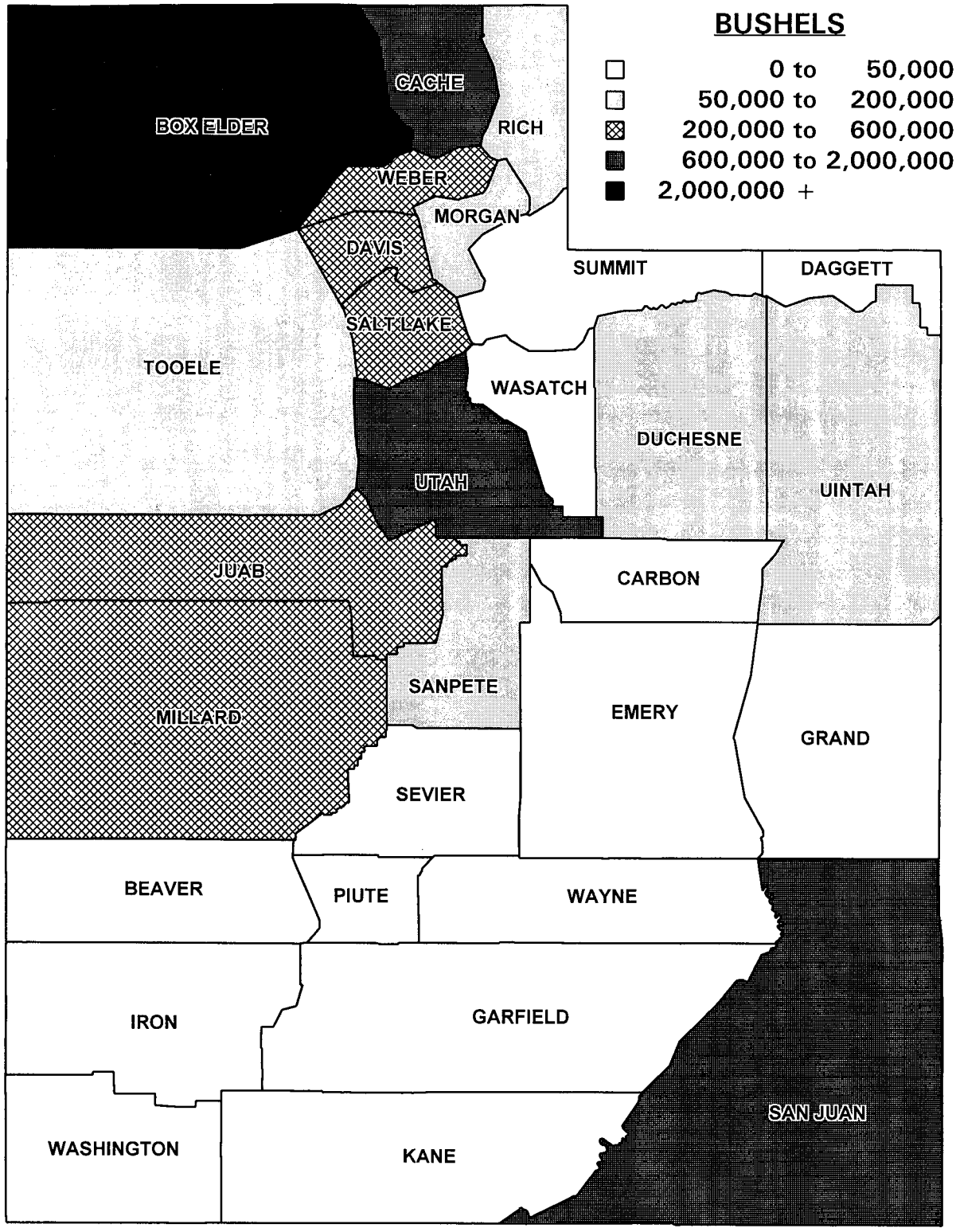
1/ Less than 500 acres harvested. 2/ Includes land from which crops were harvested or hay was cut, and land in orchards. 3/ Includes all land watered by any artificial or controlled means, such as sprinklers, furrows or ditches, and spreader dikes.

County Estimates: All Wheat, All Cropping Practices, Utah, 1997

District and County	Acres		Harvested Yield	Production
	Planted	Harvested		
	Acres		Bushels	
NORTHERN				
Box Elder	69,500	67,700	58	3,897,000
Cache	26,000	24,800	54	1,333,000
Davis	3,000	3,000	75	225,000
Morgan	1,500	1,200	47	56,000
Rich	1,500	1,500	47	71,000
Salt Lake	10,000	9,500	35	329,000
Tooele	4,000	4,000	43	171,000
Weber	4,000	3,800	74	283,000
Total	119,500	115,500	55	6,365,000
CENTRAL				
Juab	6,000	5,500	57	311,000
Millard	6,500	6,100	66	400,000
Sanpete	1,400	1,300	59	77,000
Sevier	600	600	65	39,000
Utah	21,000	19,000	44	832,000
Total	35,500	32,500	51	1,659,000
EASTERN				
Carbon	*	*	*	*
Daggett				
Duchesne	1,200	1,100	58	64,000
Emery	*	*	*	*
Grand	*	*	*	*
San Juan	38,000	35,900	25	901,000
Summit	*	*	*	*
Uintah	2,500	1,700	46	79,000
Wasatch	*	*	*	*
Other Counties	800	800	48	38,000
Total	42,500	39,500	27	1,082,000
SOUTHERN				
Beaver	*	*	*	*
Garfield	*			
Iron	1,000	800	48	38,000
Kane	*	*	*	*
Piute				
Washington	700	300	37	11,000
Wayne	*	*	*	*
Other Counties	800	400	48	19,000
Total	2,500	1,500	45	68,000
STATE	200,000	189,000	49	9,174,000

*Less than 500 planted acres, combined with other counties.

UTAH ALL WHEAT PRODUCTION
By Counties, 1998



County Estimates: All Wheat, by Cropping Practice, Utah, 1997

District and County	Irrigated				Non-Irrigated			
	Acres		Harvested Yield	Production	Acres		Harvested Yield	Production
	Planted	Harvested			Planted	Harvested		
	Acres		Bushels		Acres		Bushels	
NORTHERN								
Box Elder	24,900	24,200	92	2,223,000	44,600	43,500	38	1,674,000
Cache	7,600	7,400	81	597,000	18,400	17,400	42	736,000
Davis	2,800	2,800	78	217,000	200	200	40	8,000
Morgan	800	600	68	41,000	700	600	25	15,000
Rich	800	800	66	53,000	700	700	26	18,000
Salt Lake	1,300	1,200	82	98,000	8,700	8,300	28	231,000
Tooele	1,400	1,400	74	104,000	2,600	2,600	26	67,000
Weber	3,400	3,300	81	266,000	600	500	34	17,000
Total	43,000	41,700	86	3,599,000	76,500	73,800	37	2,766,000
CENTRAL								
Juab	2,400	2,200	73	160,000	3,600	3,300	46	151,000
Millard	4,400	4,200	76	319,000	2,100	1,900	43	81,000
Sanpete	1,200	1,100	63	69,000	200	200	40	8,000
Sevier	600	600	65	39,000				
Utah	5,900	5,400	78	423,000	15,100	13,600	30	409,000
Total	14,500	13,500	75	1,010,000	21,000	19,000	34	649,000
EASTERN								
Carbon	*	*	*	*				
Daggett								
Duchesne	1,100	1,100	58	64,000	100			
Emery	*	*	*	*				
Grand					*	*	*	*
San Juan	500	500	42	21,000	37,500	35,400	25	880,000
Summit					*	*	*	*
Uintah	900	900	60	54,000	1,600	800	31	25,000
Wasatch					*	*	*	*
Other Counties	500	500	56	28,000	300	300	33	10,000
Total	3,000	3,000	56	167,000	39,500	36,500	25	915,000
SOUTHERN								
Beaver	*	*	*	*				
Garfield	*	*	*	*	*	*	*	*
Iron	700	700	51	36,000	300	100	20	2,000
Kane	*	*	*	*				
Piute								
Washington	200	200	45	9,000	500	100	20	2,000
Wayne	*	*	*	*	*	*	*	*
Other Counties	600	400	48	19,000	200			
Total	1,500	1,300	49	64,000	1,000	200	20	4,000
STATE	62,000	59,500	81	4,840,000	138,000	129,500	33	4,334,000

* Less than 500 acres planted for all cropping practices, combined with other counties.

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County Estimates: Winter Wheat, All Cropping Practices, Utah, 1997

District and County	Acres		Harvested Yield	Production
	Planted	Harvested		
	Acres		Bushels	
NORTHERN				
Box Elder	62,500	61,000	59	3,627,000
Cache	22,000	21,000	55	1,159,000
Davis	1,500	1,500	89	133,000
Morgan	500	200	85	17,000
Rich	1,000	1,000	48	48,000
Salt Lake	9,500	9,000	34	309,000
Tooele	3,000	3,000	43	128,000
Weber	2,500	2,300	88	202,000
Total	102,500	99,000	57	5,623,000
CENTRAL				
Juab	4,500	4,500	57	258,000
Millard	4,000	3,600	70	252,000
Sanpete	400	300	53	16,000
Sevier	100	100	90	9,000
Utah	17,500	15,500	45	699,000
Total	26,500	24,000	51	1,234,000
EASTERN				
Carbon	*	*	*	*
Daggett				
Duchesne	400	300	63	19,000
Emery	*	*	*	*
Grand	*	*	*	*
San Juan	37,000	34,900	25	882,000
Summit	*	*	*	*
Uintah	1,500	700	50	35,000
Wasatch	*	*	*	*
Other Counties	600	600	47	28,000
Total	39,500	36,500	26	964,000
SOUTHERN				
Beaver				
Garfield	*	*	*	*
Iron	500	300	43	13,000
Kane	*	*	*	*
Piute				
Washington	500	100	20	2,000
Wayne	*	*	*	*
Other Counties	500	100	40	4,000
Total	1,500	500	38	19,000
STATE	170,000	160,000	49	7,840,000

* Less than 500 planted acres of all wheat, combined with other counties.

County Estimates: Spring Wheat, All Cropping Practices, Utah, 1997 98

District and County	Acres		Harvested Yield	Production
	97 Planted 98	Harvested		
	Acres		Bushels	
NORTHERN				
Box Elder	7,000	6,700	40	270,000
Cache	4,000	3,800	46	174,000
Davis	1,500	1,500	61	92,000
Morgan	1,000	1,000	39	39,000
Rich	500	500	46	23,000
Salt Lake	500	500	40	20,000
Tooele	1,000	1,000	43	43,000
Weber	1,500	1,500	54	81,000
Total	17,000	16,500	45	742,000
CENTRAL				
Juab	1,500	1,000	53	53,000
Millard	2,500	2,500	59	148,000
Sanpete	1,000	1,000	61	61,000
Sevier	500	500	60	30,000
Utah	3,500	3,500	38	133,000
Total	9,000	8,500	50	425,000
EASTERN				
Carbon				
Daggett				
Duchesne	800	800	56	45,000
Emery	*	*	*	*
Grand				
San Juan	1,000	1,000	19	19,000
Summit				
Uintah	1,000	1,000	44	44,000
Wasatch				
Other Counties	200	200	50	10,000
Total	3,000	3,000	39	118,000
SOUTHERN				
Beaver	*	*	*	*
Garfield				
Iron	500	500	50	25,000
Kane				
Piute				
Washington	200	200	45	9,000
Wayne	*	*	*	*
Other Counties	300	300	50	15,000
Total	1,000	1,000	49	49,000
STATE	30,000	29,000	46	1,334,000

*Less than 500 planted acres of all wheat, combined with other counties.

County Estimates: Corn, All Cropping Practices, Utah, 1997 1/

District and County	Acres Planted All Purposes	Corn for Grain			Corn for Silage		
		Acres Harvested	Harvested Yield	Production	Acres Harvested	Harvested Yield	Production
	Acres		Bushels		Acres	Tons	
NORTHERN							
Box Elder	11,000	6,600	152	1,000,000	4,400	27	119,000
Cache	7,000	700	140	98,000	6,300	24	151,000
Davis	3,000	1,800	150	270,000	1,200	27	32,000
Morgan	*				*	*	*
Rich							
Salt Lake	1,500	900	144	130,000	400	23	9,000
Tooele	*				*	*	*
Weber	5,000	1,200	154	185,000	3,800	25	96,000
Other Counties	500				500	26	13,000
Total	28,000	11,200	150	1,683,000	16,600	25	420,000
CENTRAL							
Juab	500	200	140	28,000	300	23	7,000
Millard	5,500	3,100	129	399,000	2,400	24	58,000
Sanpete	2,000				2,000	24	48,000
Sevier	7,000	500	120	60,000	6,500	25	163,000
Utah	12,000	5,000	126	630,000	7,000	24	165,000
Total	27,000	8,800	127	1,117,000	18,200	24	441,000
EASTERN							
Carbon	500	300	100	30,000	200	20	4,000
Daggett							
Duchesne	3,000	1,300	88	115,000	1,600	19	31,000
Emery	2,000	400	138	55,000	1,300	20	26,000
Grand							
San Juan	1,000				800	21	17,000
Summit	*				*	*	*
Uintah	2,300	1,000	105	105,000	1,300	22	29,000
Wasatch	*				*	*	*
Other Counties	200				200	20	4,000
Total	9,000	3,000	102	305,000	5,400	21	111,000
SOUTHERN							
Beaver	1,400				1,400	22	31,000
Garfield	*						
Iron	1,000				900	21	19,000
Kane							
Piute	*				*	*	*
Washington	*				*	*	*
Wayne	*				*	*	*
Other Counties	600				500	20	10,000
Total	3,000				2,800	21	60,000
STATE	67,000	23,000	135	3,105,000	43,000	24	1,032,000

* Less than 500 acres planted for all purposes, combined with other counties.

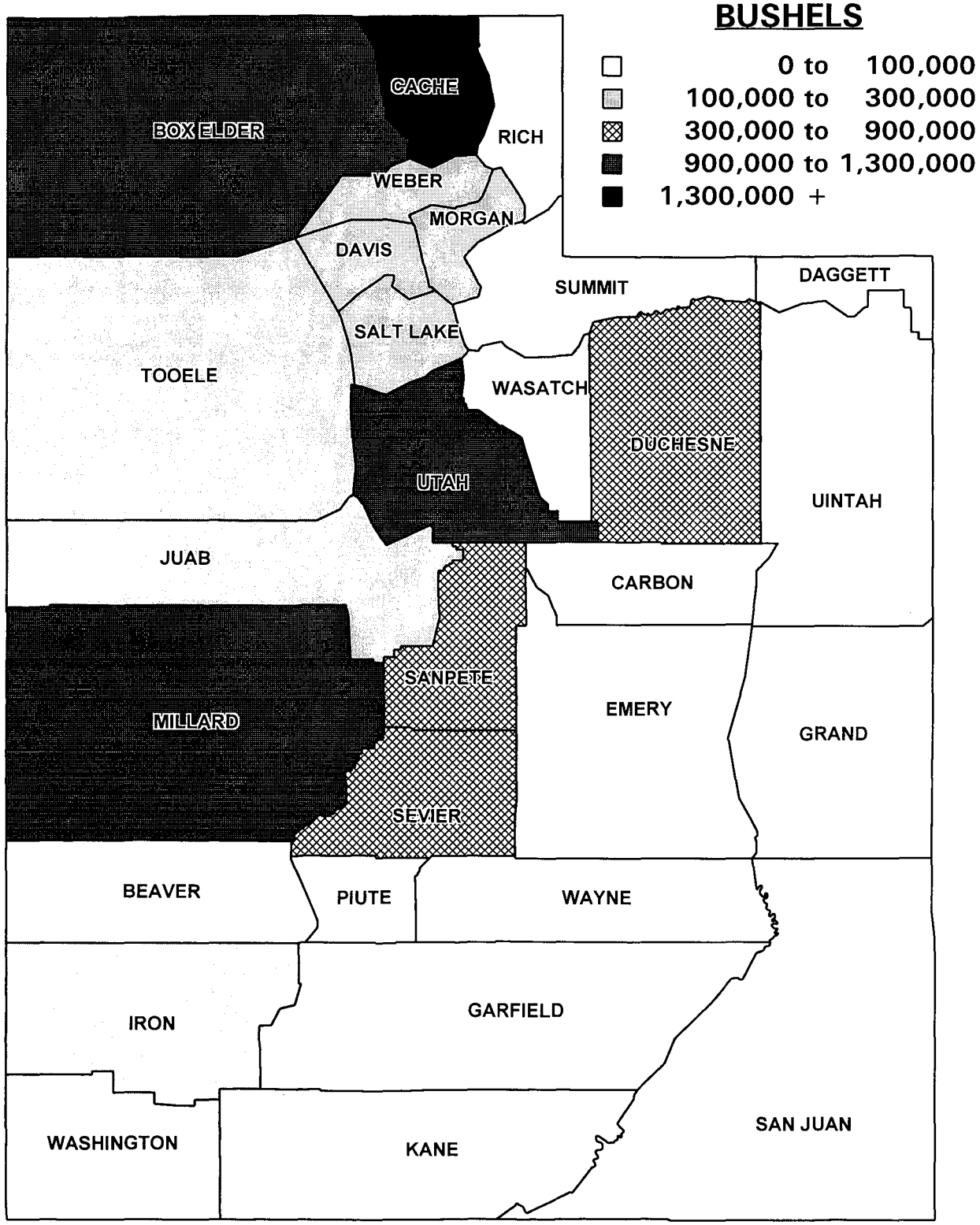
1/ Acres harvested for grain and silage may not add to acres planted for all purposes due to abandonment.

County Estimates: All Barley, All Cropping Practices, Utah, 1997

District and County	Acres		Harvested Yield	Production
	Planted	Harvested		
	Acres		Bushels	
NORTHERN				
Box Elder	11,000	10,800	97	1,047,000
Cache	22,000	21,600	79	1,700,000
Davis	1,500	1,500	93	140,000
Morgan	2,500	2,400	83	199,000
Rich	1,500	1,400	70	98,000
Salt Lake	1,500	1,500	97	145,000
Tooele	3,000	2,800	75	211,000
Weber	2,000	2,000	90	180,000
Total	45,000	44,000	85	3,720,000
CENTRAL				
Juab	2,000	1,800	78	140,000
Millard	15,000	14,000	91	1,280,000
Sanpete	6,000	5,800	87	505,000
Sevier	5,000	4,900	98	480,000
Utah	12,000	11,500	91	1,045,000
Total	40,000	38,000	91	3,450,000
EASTERN				
Carbon	*	*	*	*
Daggett				
Duchesne	4,500	4,200	75	313,000
Emery	*	*	*	*
Grand				
San Juan	*	*	*	*
Summit	*	*	*	*
Uintah	1,500	1,000	76	76,000
Wasatch	1,000	800	79	63,000
Other Counties	1,000	1,000	53	53,000
Total	8,000	7,000	72	505,000
SOUTHERN				
Beaver	1,000	800	86	69,000
Garfield	*	*	*	*
Iron	2,500	2,300	89	205,000
Kane	*	*	*	*
Piute	*	*	*	*
Washington	1,000	800	75	60,000
Wayne	1,500	1,200	75	90,000
Other Counties	1,000	900	79	71,000
Total	7,000	6,000	83	495,000
STATE	100,000	95,000	86	8,170,000

*Less than 500 planted acres combined with other counties.

UTAH BARLEY PRODUCTION
By Counties, 1997



County Estimates: All Barley, by Cropping Practice, Utah, 1997

District and County	Irrigated				Non-Irrigated			
	Acres		Harvested Yield	Production	Acres		Harvested Yield	Production
	Planted	Harvested			Planted	Harvested		
	Acres		Bushels		Acres		Bushels	
NORTHERN								
Box Elder	9,300	9,300	105	981,000	1,700	1,500	44	66,000
Cache	17,000	16,800	88	1,470,000	5,000	4,800	48	230,000
Davis	1,300	1,300	101	131,000	200	200	45	9,000
Morgan	1,800	1,800	95	171,000	700	600	47	28,000
Rich	1,500	1,400	70	98,000				
Salt Lake	1,300	1,300	105	137,000	200	200	40	8,000
Tooele	2,500	2,300	83	191,000	500	500	40	20,000
Weber	1,800	1,800	95	171,000	200	200	45	9,000
Total	36,500	36,000	93	3,350,000	8,500	8,000	46	370,000
CENTRAL								
Juab	1,800	1,700	81	137,000	200	100	30	3,000
Millard	14,100	13,300	94	1,253,000	900	700	39	27,000
Sanpete	5,800	5,800	87	505,000	200	*	*	*
Sevier	4,800	4,800	99	477,000	200	100	30	3,000
Utah	11,500	11,200	92	1,033,000	500	300	40	12,000
Total	38,000	36,800	93	3,405,000	2,000	1,200	38	45,000
EASTERN								
Carbon	*	*	*	*				
Daggett								
Duchesne	4,300	4,200	75	313,000	200			
Emery	*	*	*	*				
Grand								
San Juan					*	*	*	*
Summit	*	*	*	*	*	*	*	*
Uintah	1,000	800	85	68,000	500	200	40	8,000
Wasatch	1,000	800	79	63,000				
Other Counties	700	700	60	42,000	300	300	37	11,000
Total	7,000	6,500	75	486,000	1,000	500	38	19,000
SOUTHERN								
Beaver	1,000	800	86	69,000				
Garfield	*	*		*	*	*	*	*
Iron	2,500	2,300	89	205,000				
Kane	*	*	*	*	*	*	*	*
Piute	*	*	*	*	*	*	*	*
Washington	800	700	80	56,000	200	100	40	4,000
Wayne	1,500	1,200	75	90,000				
Other Counties	700	700	90	63,000	300	200	40	8,000
Total	6,500	5,700	85	483,000	500	300	40	12,000
STATE	88,000	85,000	91	7,724,000	12,000	10,000	45	446,000

*Less than 500 acres planted for all cropping practices combined with other counties.

County Estimates: Oats, All Cropping Practices, Utah, 1997

District and County	Acres		Harvested Yield	Production
	Planted	Harvested for Grain		
	Acres		Bushels	
NORTHERN				
Box Elder	2,500	800	105	84,000
Cache	2,000	600	80	48,000
Davis	700	200	85	17,000
Morgan	500	100	100	10,000
Rich	1,100	300	80	24,000
Salt Lake	600	100	90	9,000
Tooele	1,500	100	70	7,000
Weber	1,100	200	90	18,000
Total	10,000	2,400	90	217,000
CENTRAL				
Juab	500	100	70	7,000
Millard	4,400	900	60	54,000
Sanpete	3,100	400	80	32,000
Sevier	3,300	600	70	42,000
Utah	2,700	600	60	36,000
Total	14,000	2,600	66	171,000
EASTERN				
Carbon	900	300	70	21,000
Daggett	*			
Duchesne	2,900	500	80	40,000
Emery	2,500	400	75	30,000
Grand	*			
San Juan	1,800	700	30	21,000
Summit	900	100	90	9,000
Uintah	1,900	500	72	36,000
Wasatch	800	100	90	9,000
Other Counties	300			
Total	12,000	2,600	64	166,000
SOUTHERN				
Beaver	2,500	200	80	16,000
Garfield	2,200	200	60	12,000
Iron	4,100	400	90	36,000
Kane	1,100	100	80	8,000
Piute	1,100	200	80	16,000
Washington	1,000	100	80	8,000
Wayne	2,000	200	80	16,000
Total	14,000	1,400	80	112,000
STATE	50,000	9,000	74	666,000

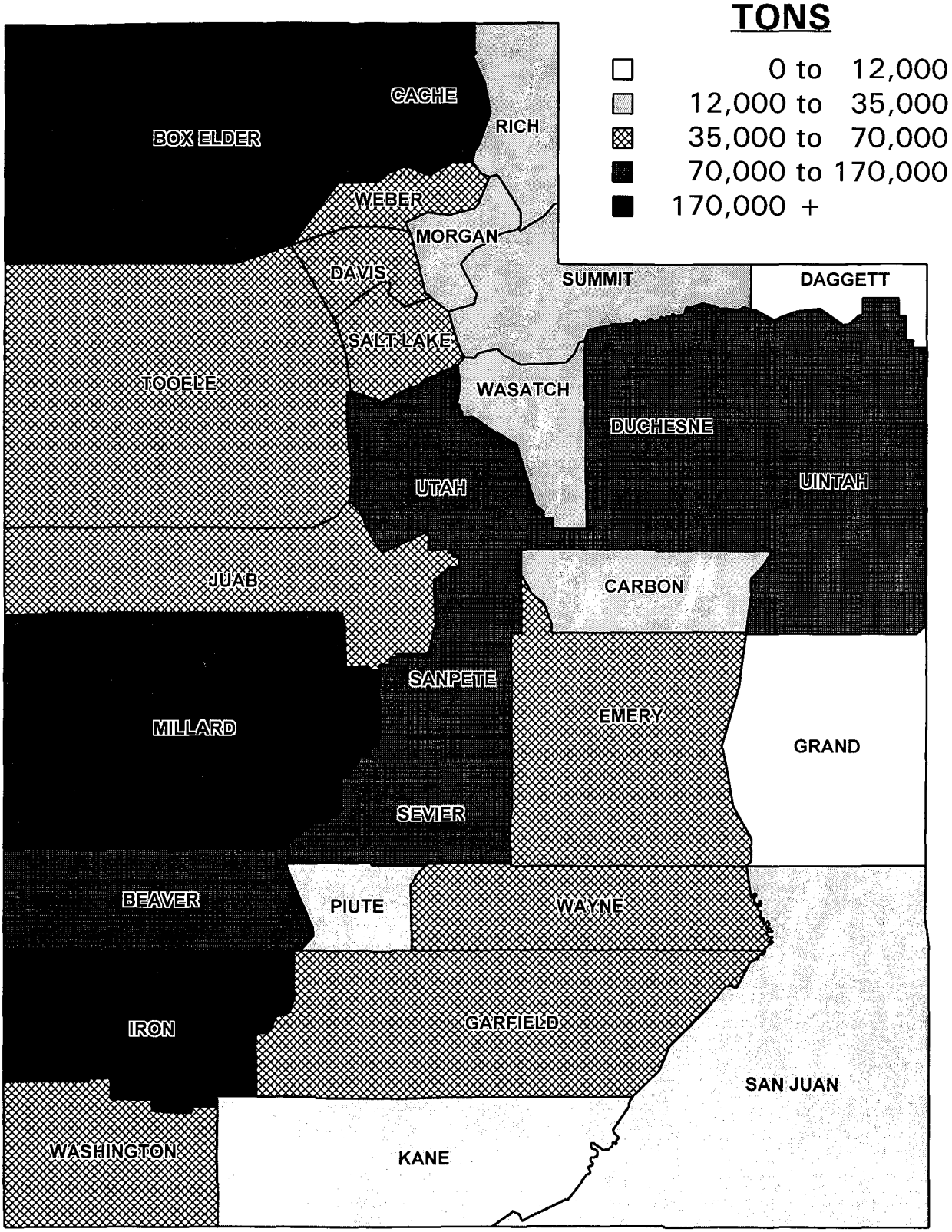
*Less than 500 planted acres, combined with other counties.

County Estimates: Alfalfa & Alfalfa Mixtures for Hay, All Cropping Practices, Utah, 1997

District and County	Acres Harvested	Harvested Yield	Production
	Acres	Tons	
NORTHERN			
Box Elder	49,500	4.7	235,000
Cache	55,000	3.6	200,000
Davis	8,500	4.6	39,000
Morgan	6,000	4.2	25,000
Rich	11,000	2.8	31,000
Salt Lake	12,000	4.3	51,000
Tooele	14,000	4.1	57,000
Weber	14,000	4.9	68,000
Total	170,000	4.2	706,000
CENTRAL			
Juab	16,000	4.1	65,000
Millard	63,000	4.8	302,000
Sanpete	34,000	4.3	145,000
Sevier	21,000	5.0	104,000
Utah	32,000	4.6	147,000
Total	166,000	4.6	763,000
EASTERN			
Carbon	6,000	3.4	20,500
Daggett	3,000	3.3	10,000
Duchesne	37,000	3.9	146,000
Emery	14,500	3.7	54,000
Grand	1,500	4.3	6,500
San Juan	4,000	3.0	12,000
Summit	8,000	2.9	23,000
Uintah	26,000	4.5	117,000
Wasatch	7,000	4.3	30,000
Total	107,000	3.9	419,000
SOUTHERN			
Beaver	24,500	4.7	114,000
Garfield	10,000	3.5	35,000
Iron	37,500	4.9	182,000
Kane	3,500	3.4	12,000
Piute	6,500	3.8	25,000
Washington	10,000	5.1	51,000
Wayne	10,000	3.7	37,000
Total	102,000	4.5	456,000
STATE	545,000	4.3	2,344,000

UTAH ALFALFA HAY PRODUCTION

By Counties, 1997



County Estimates: Other Hay, All Cropping Practices, Utah, 1997

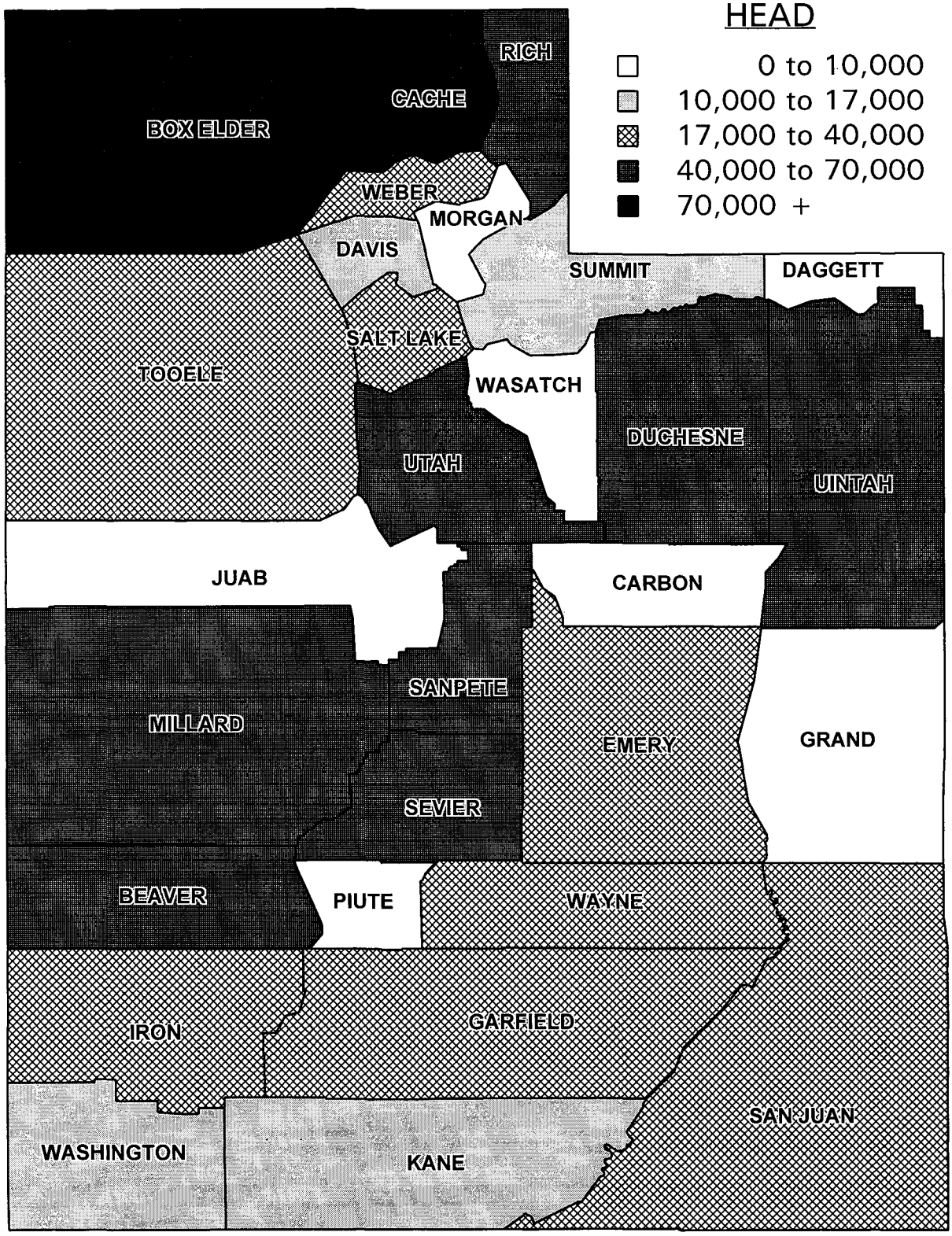
District and County	Acres Harvested	Harvested Yield	Production
	Acres	Tons	
NORTHERN			
Box Elder	9,000	2.0	18,000
Cache	8,000	2.3	18,000
Davis	3,500	2.3	8,000
Morgan	2,000	2.5	5,000
Rich	41,500	1.8	74,000
Salt Lake	1,500	2.0	3,000
Tooele	3,000	2.0	6,000
Weber	2,500	2.4	6,000
Total	71,000	1.9	138,000
CENTRAL			
Juab	2,000	2.0	4,000
Millard	6,000	2.3	14,000
Sanpete	10,000	2.2	22,000
Sevier	4,000	2.8	11,000
Utah	9,000	2.4	22,000
Total	31,000	2.4	73,000
EASTERN			
Carbon	700	2.1	1,500
Daggett	2,500	2.4	6,000
Duchesne	16,500	2.3	38,000
Emery	3,000	2.3	7,000
Grand	200	2.5	500
San Juan	600	1.7	1,000
Summit	6,500	2.6	17,000
Uintah	5,500	2.4	13,000
Wasatch	1,500	2.7	4,000
Total	37,000	2.4	88,000
SOUTHERN			
Beaver	3,000	3.0	9,000
Garfield	3,000	2.3	7,000
Iron	4,000	2.5	10,000
Kane	500	2.0	1,000
Piute	1,500	2.7	4,000
Washington	2,000	3.0	6,000
Wayne	2,000	2.5	5,000
Total	16,000	2.6	42,000
STATE	155,000	2.2	341,000

County Estimates: All Hay, All Cropping Practices, Utah, 1997

District and County	Acres Harvested	Harvested Yield	Production
	Acres	Tons	
NORTHERN			
Box Elder	58,500	4.3	253,000
Cache	63,000	3.5	218,000
Davis	12,000	3.9	47,000
Morgan	8,000	3.8	30,000
Rich	52,500	2.0	105,000
Salt Lake	13,500	4.0	54,000
Tooele	17,000	3.7	63,000
Weber	16,500	4.5	74,000
Total	241,000	3.5	844,000
CENTRAL			
Juab	18,000	3.8	69,000
Millard	69,000	4.6	316,000
Sanpete	44,000	3.8	167,000
Sevier	25,000	4.6	115,000
Utah	41,000	4.1	169,000
Total	197,000	4.2	836,000
EASTERN			
Carbor	6,700	3.3	22,000
Daggett	5,500	2.9	16,000
Duchesne	53,500	3.4	184,000
Emery	17,500	3.5	61,000
Grand	1,700	4.1	7,000
San Juan	4,600	2.8	13,000
Summit	14,500	2.8	40,000
Uintah	31,500	4.1	130,000
Wasatch	8,500	4.0	34,000
Total	144,000	3.5	507,000
SOUTHERN			
Beaver	27,500	4.5	123,000
Garfield	13,000	3.2	42,000
Iron	41,500	4.6	192,000
Kane	4,000	3.3	13,000
Piute	8,000	3.6	29,000
Washington	12,000	4.8	57,000
Wayne	12,000	3.5	42,000
Total	118,000	4.2	498,000
STATE	700,000	3.8	2,685,000

UTAH ALL CATTLE INVENTORY

By counties, January 1, 1998



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105 106

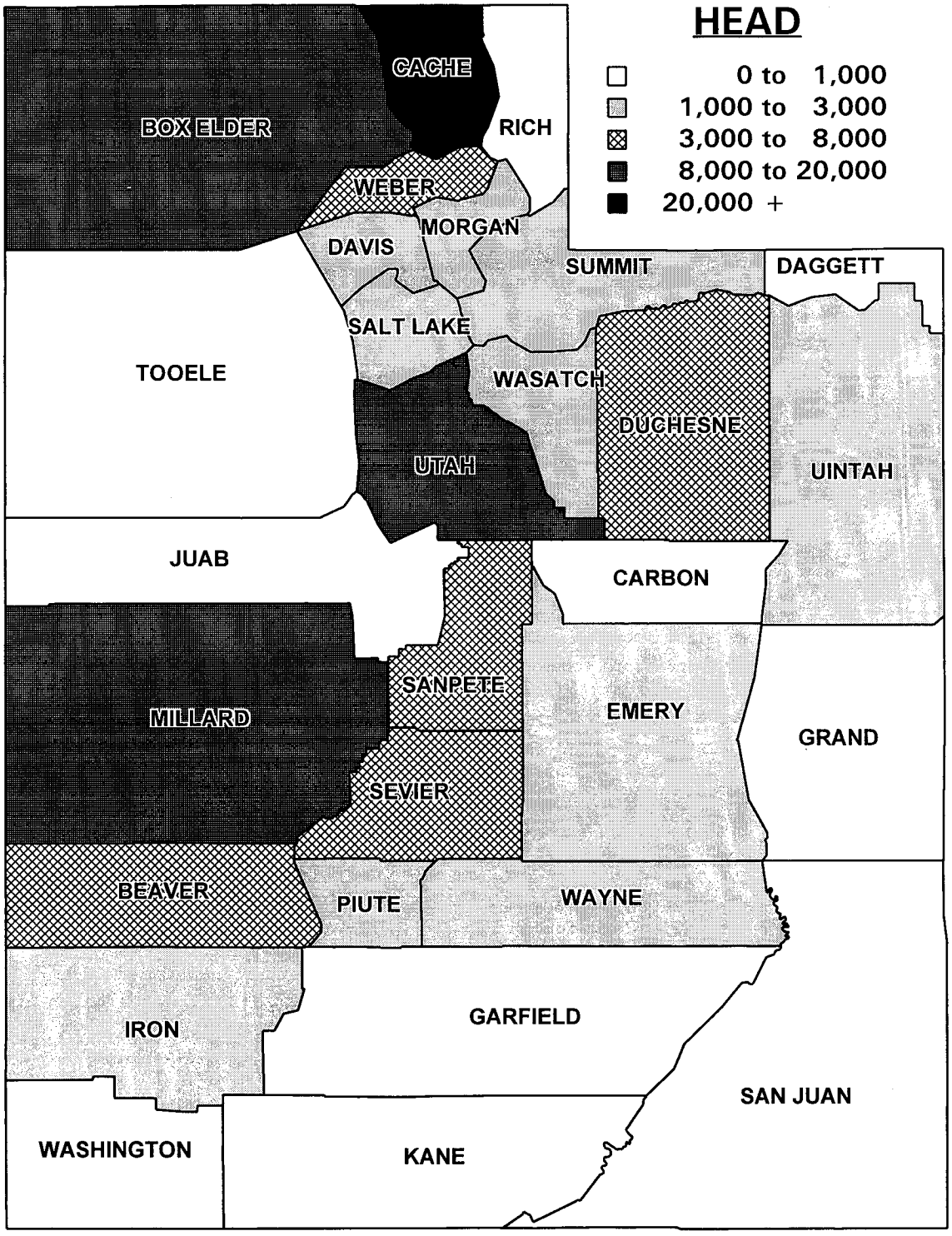
County Estimates: Cattle, Utah, January 1, 1997-98

County	All Cattle		All Cows		Beef Cows		Milk Cows	
	1997	1998	1997	1998	1997	1998	1997	1998 1/
	Number							
NORTHERN								
Box Elder . .	105,000	103,000	37,700	38,000	26,500	28,000	11,200	10,000
Cache	81,000	75,000	32,500	32,000	11,000	10,000	21,500	22,000
Davis	16,000	14,000	8,200	8,500	6,500	7,000	1,700	1,500
Morgan	10,000	9,000	5,800	6,000	4,500	4,500	1,300	1,500
Rich	50,000	45,000	*36,500	31,000	36,500	31,000	2/	
Salt Lake . .	18,000	17,000	8,500	7,500	6,500	5,500	2,000	2,000
Tooele	22,000	22,000	*13,000	13,000	13,000	13,000	2/	
Weber	34,000	30,000	13,500	14,000	7,500	8,000	6,000	6,000
CENTRAL								
Juab	10,000	9,000	5,500	5,000	5,000	4,500	500	500
Millard	58,000	60,000	30,000	27,500	22,500	19,000	7,500	8,500
Sanpete . . .	51,000	47,000	20,500	18,500	13,500	12,500	7,000	6,000
Sevier	58,000	55,000	19,000	20,000	14,500	15,000	4,500	5,000
Utah	61,000	54,000	30,000	28,000	22,500	20,000	7,500	8,000
EASTERN								
Carbon	9,000	9,000	*5,000	5,000	5,000	5,000	2/	
Daggett . . .	4,000	3,000	3,500	3,000	3,500	3,000		
Duchesne . .	67,000	64,000	38,400	36,500	35,000	33,000	3,400	3,500
Emery	34,000	31,000	15,000	14,500	14,000	13,500	1,000	1,000
Grand	3,000	3,000	1,000	1,000	1,000	1,000		
San Juan . .	20,000	18,000	*10,500	11,500	10,500	11,000	2/	500
Summit . . .	16,000	15,000	11,000	10,500	9,500	9,000	1,500	1,500
Uintah	47,000	48,000	22,100	21,000	20,500	19,500	1,600	1,500
Wasatch . . .	10,000	9,000	4,000	4,000	2,000	2,000	2,000	2,000
SOUTHERN								
Beaver	48,000	42,000	17,500	16,500	14,000	13,000	3,500	3,500
Garfield . . .	20,000	17,000	13,600	13,000	13,000	12,500	600	500
Iron	20,000	19,000	10,500	10,500	9,000	8,500	1,500	2,000
Kane	11,000	10,000	*5,500	7,000	5,500	7,000	2/	
Piute	9,000	8,000	4,500	5,500	2,500	3,500	2,000	2,000
Washington	18,000	16,000	*8,500	10,500	8,500	10,500	2/	
Wayne	20,000	18,000	12,500	11,000	11,500	10,000	1,000	1,000
Counties with less than 500 head			1,200				1,200	
STATE	930,000	870,0000	445,000	430,000	355,000	340,000	90,000	90,000

1/ Estimates rounded to the nearest 500. Counties with less than 50 milk cows rounded to zero. 2/ Included in total of counties with less than 500 milk cows.
* Milk cows excluded from county all cows total, but included in all cows for counties with less than 500 milk cows.

UTAH MILK COW INVENTORY

By Counties, January 1, 1998



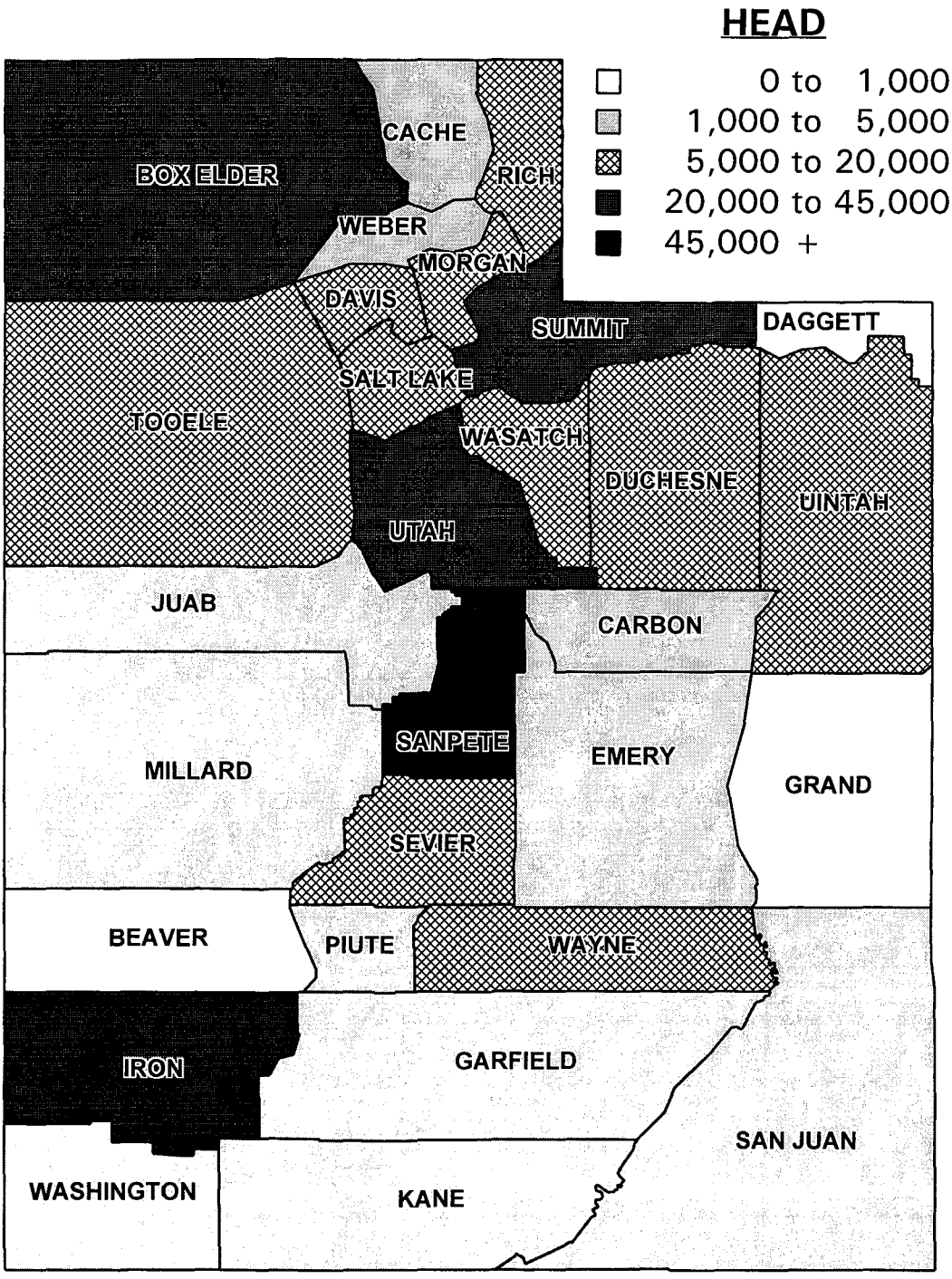
County Estimates: Utah Mink Pelts Produced 1995-96
Females Bred to Produce Kits 1996-97

District and County	Pelts Produced		Females Bred to Produce Kits	
	1995	1996	1996	1997
	Number			
NORTHERN				
Cache	66,000	69,000	17,600	20,300
Morgan	101,000	113,000	33,300	42,200
Salt Lake	39,000	58,000	11,600	19,200
Other Counties	15,000	20,000	4,900	5,200
Total	221,000	260,000	67,400	87,000
CENTRAL				
Utah	283,000	254,000	76,200	74,000
Other Counties	12,000	8,000	3,600	2,000
Total	295,000	262,000	79,800	76,000
EASTERN				
Summit	52,000	61,000	19,300	21,500
Other Counties	2,000	2,000	500	500
Total	54,000	63,000	19,800	22,000
STATE	570,000	585,000	167,000	185,000

County Estimates: Breeding Sheep and Lambs, Utah, January 1, 1997-98

District and County	1997	1998
	Number	
NORTHERN		
Box Elder	33,000	30,000
Cache	3,000	3,000
Davis	13,000	10,000
Morgan	6,500	6,000
Rich	8,000	8,000
Salt Lake	18,500	19,000
Tooele	7,000	6,000
Weber	5,000	4,000
Total	94,000	86,000
CENTRAL		
Juab	4,000	4,000
Millard	3,000	2,000
Sanpete	59,000	62,000
Sevier	11,000	10,000
Utah	44,000	39,000
Total	121,000	117,000
EASTERN		
Carbon	4,500	4,500
Daggett	500	500
Duchesne	9,000	7,000
Emery	5,500	4,000
Grand	500	
San Juan	3,500	3,000
Summit	25,000	22,000
Uintah	14,500	13,000
Wasatch	12,000	11,000
Total	75,000	65,000
SOUTHERN		
Beaver	1,000	500
Garfield	2,000	2,000
Iron	34,000	33,000
Kane	1,500	1,500
Piute	3,000	3,000
Washington	500	1,000
Wayne	7,000	6,000
Total	49,000	47,000
STATE	339,000	315,000

UTAH BREEDING SHEEP INVENTORY
By Counties, January 1, 1998

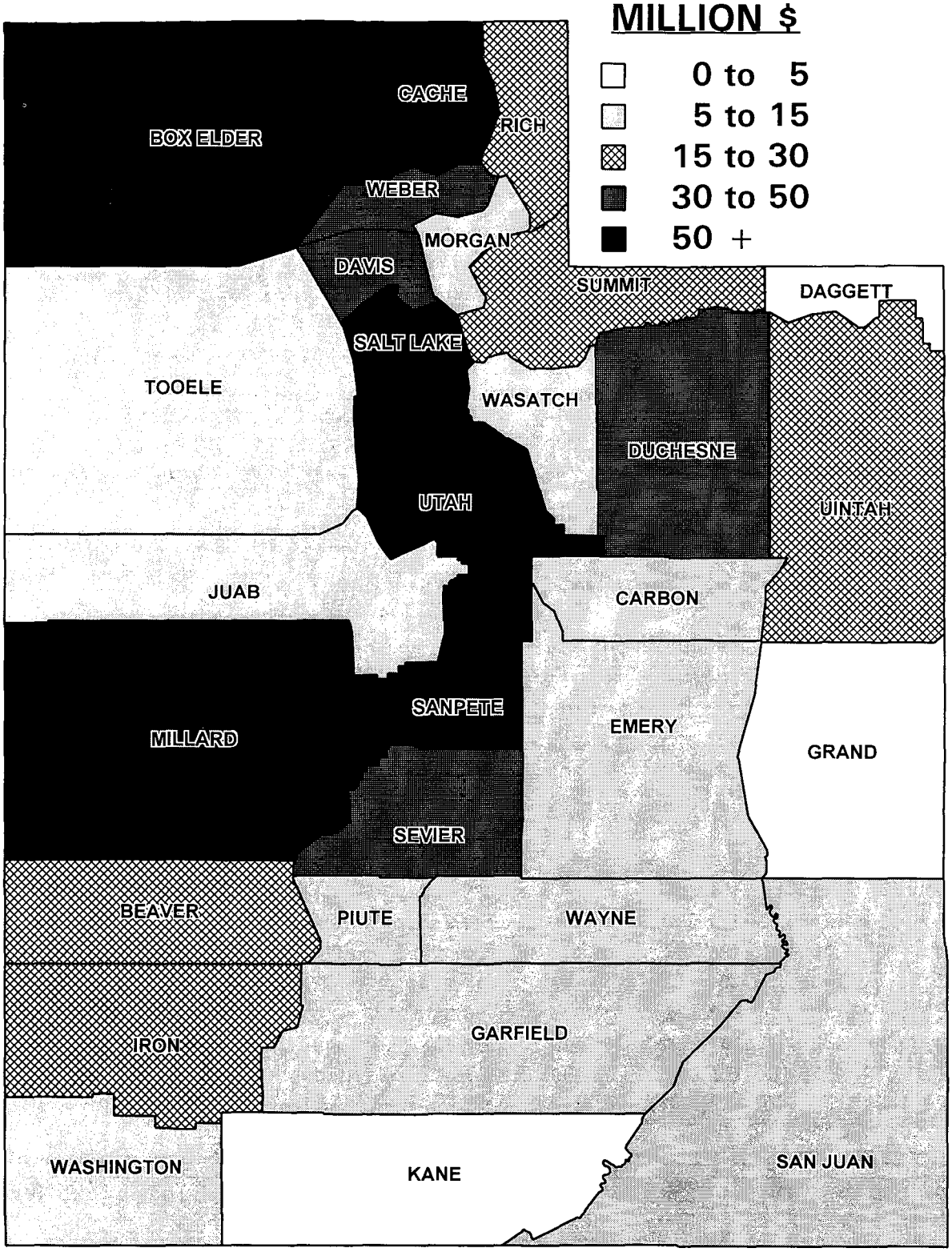


County Estimates: Cash Receipts from Farming, by County - 1995 Revised, 1996 Preliminary

District and County	Livestock and Livestock Products		Crops		Total	
	1995	1996	1995	1996	1995	1996
	Million Dollars					
NORTHERN						
Box Elder	50.5	55.8	35.7	39.4	86.2	95.2
Cache	77.5	86.2	20.0	22.1	97.5	108.3
Davis	14.4	14.5	22.0	22.2	36.4	36.7
Morgan	9.4	12.3	1.5	1.7	10.9	14.0
Rich	15.8	16.6	3.8	3.6	19.6	20.2
Salt Lake	32.8	37.9	11.9	11.8	44.7	49.7
Tooele	8.0	8.2	3.6	3.7	11.6	11.9
Weber	27.1	28.3	6.8	7.2	33.9	35.5
Total	235.5	259.8	105.3	111.7	340.8	371.5
CENTRAL						
Juab	5.1	5.1	4.4	4.6	9.5	9.7
Millard	23.4	35.8	23.8	24.2	47.2	60.0
Sanpete	73.5	74.3	6.9	6.7	80.4	81.0
Sevier	29.9	31.0	5.4	5.4	35.3	36.4
Utah	62.9	70.2	26.1	30.8	89.0	101.0
Total	194.8	216.4	66.6	71.7	261.4	288.1
EASTERN						
Carbon	4.3	4.2	0.8	0.8	5.1	5.0
Daggett	0.9	0.9	0.4	0.4	1.3	1.3
Duchesne	29.0	29.5	6.8	6.5	35.8	36.0
Emery	10.3	11.0	2.2	2.0	12.5	13.0
Grand	1.3	1.5	0.6	0.5	1.9	2.0
San Juan	8.0	7.8	4.9	2.0	12.9	9.8
Summit	12.7	14.5	1.3	1.2	14.0	15.7
Uintah	18.6	17.3	5.3	4.9	23.9	22.2
Wasatch	10.1	9.4	1.6	1.6	11.7	11.0
Total	95.2	96.1	23.9	19.9	119.1	116.0
SOUTHERN						
Beaver	17.9	24.7	4.6	4.3	22.5	29.0
Garfield	6.7	7.0	1.4	1.2	8.1	8.2
Iron	11.9	12.1	11.4	10.8	23.3	22.9
Kane	3.7	3.9	0.5	0.5	4.2	4.4
Piute	8.2	8.2	1.2	1.1	9.4	9.3
Washington	7.7	6.9	4.0	4.0	11.7	10.9
Wayne	9.7	11.0	1.8	1.8	11.5	12.8
Total	65.8	73.8	24.9	23.7	90.7	97.5
STATE	591.3	646.1	220.7	227.0	812.0	873.1

UTAH CASH RECEIPTS FROM FARMING

By Counties, 1996



1992 Census of Agriculture: Farms, Land in Farms, and Selected Items, by County, Utah 1/

District and County	Number of Farms	Land in Farms	Average Size of Farms	Total Cropland	Harvested Cropland	Irrigated Land	Estimated Market Value of Land & Buildings	
							Average per Farm	Average per Acre
	Number	Acres					Dollars	
NORTHERN								
Box Elder	1,085	1,449,976	1,336	363,843	171,708	120,583	464,879	360
Cache . .	1,189	267,924	225	175,063	120,044	87,475	263,915	1,162
Davis . . .	582	50,357	87	27,242	18,573	20,965	322,845	4,009
Morgan .	258	234,576	909	17,012	9,474	7,960	414,725	473
Rich . . .	143	493,073	3,448	78,618	45,631	56,389	861,753	255
Salt Lake	686	107,663	157	(D)	26,308	16,299	328,402	2,158
Tooele . .	300	437,238	1,457	37,063	13,882	16,479	360,822	244
Weber . .	945	256,522	271	50,283	27,860	31,758	231,593	832
CENTRAL								
Juab	203	332,686	1,639	71,294	25,270	20,097	632,776	376
Millard . . .	612	484,156	791	181,377	86,933	88,841	451,119	604
Sanpete . .	696	447,463	643	107,147	49,073	99,061	327,858	482
Sevier . . .	406	158,189	390	50,994	31,129	43,919	222,098	541
Utah	1,696	450,315	266	151,347	83,047	83,601	260,092	1,018
EASTERN								
Carbon . .	182	291,860	1,604	18,537	5,592	7,895	457,355	290
Daggett . .	29	21,958	757	(D)	3,544	6,891	419,810	554
Duchesne	733	399,011	544	124,081	57,788	117,280	275,612	481
Emery . . .	420	240,535	573	55,447	18,787	31,669	209,940	377
Grand . . .	88	63,116	717	5,293	2,355	3,096	384,654	536
San Juan .	206	324,921	1,577	133,713	48,031	5,491	453,919	285
Summit . .	419	373,582	892	36,967	17,217	29,417	507,088	641
Uintah . . .	716	1,294,703	1,808	(D)	42,273	70,011	288,422	161
Wasatch .	274	139,347	509	17,547	10,130	15,000	648,324	1,013
SOUTHERN								
Beaver . . .	215	192,288	894	39,958	27,149	33,519	290,607	327
Garfield . .	249	137,530	552	41,286	16,819	29,231	441,225	791
Iron	365	434,183	1,190	75,427	48,916	51,857	481,928	385
Kane	136	209,819	1,543	12,296	3,337	4,999	563,983	364
Piute	109	58,522	537	20,968	10,923	13,789	322,525	602
Washington	389	167,374	430	36,612	8,515	11,987	333,929	770
Wayne . . .	189	105,576	559	(D)	13,039	16,955	280,672	530
STATE	13,520	9,624,463	712	2,093,779	1,043,347	1,142,514	347,982	491

(D) - Withheld to avoid disclosing data for individual farms.

1/ Source: 1992 Census of Agriculture, U.S. Department of Commerce, Bureau of the Census.

1992 Census of Agriculture: Number of Farms by Value of Sales, by County, Utah 1/

District and County	Under $2,500	$2,500 to $4,999	$5,000 to $9,999	$10,000 to $24,999	$25,000 to $49,999	$50,000 to $99,999	$100,000 Plus
	Number of Farms						
NORTHERN							
Box Elder	232	114	124	202	118	118	177
Cache	287	126	172	174	112	104	214
Davis	232	91	76	84	23	25	51
Morgan	93	40	24	36	10	18	37
Rich	12	11	15	19	21	29	36
Salt Lake	314	112	72	90	40	14	44
Tooele	110	35	45	51	28	17	14
Weber	398	153	113	121	52	38	70
CENTRAL							
Juab	48	22	31	38	35	7	22
Millard	92	44	80	128	94	74	100
Sanpete	155	67	78	132	77	59	128
Sevier	75	51	56	93	49	31	51
Utah	634	243	238	224	104	85	168
EASTERN							
Carbon	81	28	24	24	9	10	6
Daggett	5	2	4	6	2	7	3
Duchesne	152	98	113	151	89	82	48
Emery	131	66	70	70	45	21	17
Grand	35	11	7	13	9	7	6
San Juan	54	14	39	31	17	20	31
Summit	102	65	64	74	48	19	47
Uintah	234	127	103	107	59	47	39
Wasatch	110	40	41	30	19	13	21
SOUTHERN							
Beaver	46	17	23	36	25	17	51
Garfield	54	25	40	63	34	26	17
Iron	81	48	45	53	38	37	53
Kane	32	18	26	32	13	9	6
Piute	11	8	18	21	20	14	17
Washington	145	53	70	60	28	22	11
Wayne	24	22	34	54	23	17	15
STATE TOTAL	3,979	1,751	1,845	2,217	1,241	987	1,500

1/ Source: 1992 Census of Agriculture, U.S. Department of Commerce, Bureau of the Census.

1992 Census of Agriculture: Number of Farms by Total Land in Farms, by County, Utah 1/

District and County	1 - 9 Acres	10 - 49 Acres	50 - 179 Acres	180 - 499 Acres	500 - 999 Acres	1,000 Plus Acres
	Number of Farms					
NORTHERN						
Box Elder . .	184	221	253	158	88	181
Cache	159	342	332	239	75	42
Davis	192	221	116	42	7	4
Morgan	57	86	45	31	12	27
Rich	6	15	17	25	23	57
Salt Lake . .	310	236	96	24	4	16
Tooele	51	70	58	35	33	53
Weber	238	401	201	71	21	13
CENTRAL						
Juab	10	19	53	38	30	53
Millard	41	82	154	153	74	108
Sanpete . . .	55	138	210	153	63	77
Sevier	39	108	133	87	18	21
Utah	475	644	333	134	46	64
EASTERN						
Carbon	30	48	41	17	11	35
Daggett . . .	2	2	6	8	1	10
Duchesne . .	37	144	223	183	81	65
Emery	23	92	116	107	36	46
Grand	26	26	14	10	4	8
San Juan . .	10	24	26	29	30	87
Summit . . .	47	121	98	58	30	65
Uintah	72	227	179	106	62	70
Wasatch . . .	35	113	66	33	11	16
SOUTHERN						
Beaver	19	48	55	46	19	28
Garfield . . .	6	53	62	69	29	30
Iron	32	82	71	66	34	80
Kane	9	18	18	23	24	44
Piute	3	11	35	30	21	9
Washington	80	96	94	44	33	42
Wayne	14	47	71	38	7	12
STATE TOTAL	2,262	3,735	3,176	2,057	927	1,363

1/ Source: 1992 Census of Agriculture, U.S. Department of Commerce, Bureau of the Census.

Weather

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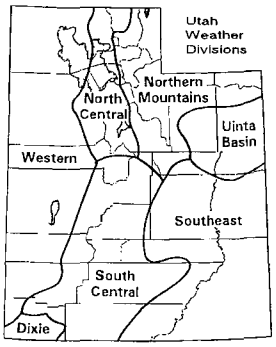
Web Page: http://climate.usu.edu



Weather Data

In the precipitation table below, monthly precipitation distribution, as percent of normal, is given for each of the seven climate divisions. The temperature table is similar but is for temperature departures. The portion of the State that lies within each climate division can be determined by referring to the map at the right.

Precipitation Summary

Throughout 1997, the precipitation was balanced enough from one month to the next to keep the state generally near normal. The year ended with precipitation totals slightly above normal across the state. Precipitation totals were well above normal in January, August and September, while the lowest percentages of normal came in March with less than 40 percent of normal in all divisions. The new water-year got a slow start with generally below normal precipitation in October, November and December (in spite of El Niño).

Precipitation: Percent of Normal, by Climate Division, 1997

Division	Month												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Western	211	71	9	126	115	203	71	131	314	61	100	39	121
Dixie	312	57	0	63	63	27	104	146	456	67	87	46	120
N. Central	255	82	36	101	106	159	163	143	112	96	62	87	109
S. Central	271	98	4	146	88	186	83	169	312	77	75	59	128
N. Mountains	221	74	31	133	107	163	79	154	227	94	73	56	112
Uintah Basin	327	140	18	219	109	159	76	353	362	80	123	82	173
Southeast	243	159	16	220	97	138	163	176	300	79	71	70	145

Temperature Summary

The year ended with temperature departures only slightly above normal. Temperature departures were mixed throughout the year in an on and off pattern from one month to the next. The highest departures from normal were in March, while the lowest departures were reported in April and July.

Mean Temperature: Departure from Normal, by Climate Division, 1997

Division	Month												Annual
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Western	1.9	0.5	3.4	-2.3	2.5	0.2	2.8	1.7	1.8	-1.2	1.7	0.1	0.6
Dixie	1.4	-0.2	6.2	-0.5	5.9	0.8	-0.7	2.0	2.0	-0.5	2.6	-1.2	1.5
N. Central	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
S. Central	1.3	-1.6	4.4	-2.0	3.4	0.2	-2.4	0.4	1.3	-1.0	1.5	-1.6	0.3
N. Mountains	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0
Uintah Basin	3.6	-2.0	1.1	-3.1	1.7	1.9	-2.1	0.2	1.8	-0.1	-0.2	1.1	0.3
Southeast	2.7	0.1	4.0	-2.2	3.4	1.5	-1.1	0.1	2.0	-0.4	-0.2	1.3	0.9

Mean Monthly Temperature (°F), Utah, 1997

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	28.2	33.9	44.4	47.7	60.1	68.0	71.5	73.2	63.9	49.1	38.9	27.2	50.5
Delta	26.9	32.0	44.4	46.6	60.2	67.0	71.8	75.1	64.8	49.4	39.7	25.3	50.3
Enterprise Beryl	28.8	32.8	41.5	44.1	57.3	64.0	67.7	70.2	62.0	47.3	39.1	27.5	48.5
Eskdale	29.4	33.3	45.4	46.3	60.9	69.2	72.6	76.0	65.2	52.1	40.4	26.6	51.5
Modena	29.5	34.4	44.4	45.7	59.8	65.6	70.1	72.0	63.6	50.0	40.6	28.7	50.4
Rosette	25.0	29.0	38.6	41.0	56.2	62.1	67.9	69.5	59.6	45.1	35.1	24.2	46.1
Average	***28.0***	***32.6***	***43.1***	***45.2***	***59.1***	***66.0***	***70.3***	***72.7***	***63.2***	***48.8***	***39.0***	***26.6***	***49.5***
DIXIE													
St. George	43.6	47.4	57.6	60.0	76.0	80.9	85.2	86.4	78.7	63.3	53.0	41.5	64.5
Zion Nat'l Park	39.7	43.8	57.4	57.0	73.0	77.4	83.0	82.6	74.5	62.2	52.2	37.9	61.7
Average	***41.7***	***45.6***	***57.5***	***58.5***	***74.5***	***79.2***	***84.1***	***84.5***	***76.6***	***62.8***	***52.6***	***39.7***	***63.1***
NORTH CENTRAL													
Corinne	29.4	33.4	42.0	45.3	58.9	65.5	69.0	71.6	63.3	46.1	37.8	23.2	48.8
Farmington	32.7	35.0	45.0	47.5	61.9	68.6	75.0	76.0	67.2	53.1	42.5	30.2	52.9
Logan USU	27.3	27.9	41.2	43.8	58.6	65.6	70.3	72.9	64.2	49.0	37.6	22.1	48.4
Ogden Pioneer	31.8	33.4	45.9	47.6	63.2	68.9	73.7	76.1	66.6	52.5	41.0	28.2	52.4
Pleasant Grove	29.1	33.0	45.7	47.0	61.3	68.8	73.3	74.6	65.3	52.6	41.9	28.9	51.8
Provo BYU	31.0	34.6	47.4	48.8	63.0	70.8	74.7	76.5	67.5	53.7	43.1	29.4	53.4
SLC Airport	32.2	35.2	46.0	48.3	63.4	70.1	75.0	78.7	67.8	52.8	42.1	27.9	53.3
Tooele	31.5	33.6	45.1	48.0	62.2	69.4	73.4	76.5	65.8	52.7	41.8	28.4	52.4
Tremonton	28.3	32.1	43.0	46.9	59.7	67.2	72.0	74.0	64.9	49.1	38.9	26.2	50.2
Trenton	25.5	26.2	38.4	42.1	56.0	63.4	67.6	69.3	60.6	45.8	34.9	19.3	45.8
Average	***29.9***	***32.4***	***44.0***	***46.5***	***60.8***	***67.8***	***72.4***	***74.6***	***65.3***	***50.7***	***40.2***	***26.4***	***50.9***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	22.5	23.2	34.7	34.9	49.5	56.1	60.8	60.6	54.1	40.8	31.9	21.0	40.8
Cedar City FAA	30.6	32.7	45.4	45.1	60.8	67.2	72.2	73.8	65.0	51.2	42.2	29.4	51.3
Escalante	30.9	34.8	46.2	47.6	62.3	68.0	72.1	71.0	64.0	51.4	40.5	30.4	51.6
Fillmore	29.3	31.9	45.9	46.5	60.8	66.6	71.3	73.4	63.9	52.0	41.6	26.2	50.8
Kanab	35.2	39.0	47.6	49.9	63.5	66.9	72.2	72.3	66.9	53.0	44.4	35.0	53.8
Koosharem	23.6	23.9	38.6	39.3	52.8	57.9	63.3	62.6	57.1	43.8	35.4	23.3	43.5
Levan	27.7	30.7	43.0	44.5	58.4	65.5	70.0	71.8	62.8	49.7	40.2	25.6	49.2
Manti	27.0	26.8	41.0	43.3	57.3	64.3	68.2	68.9	61.5	49.0	39.5	25.2	47.7
Nephi	28.6	31.1	43.9	45.2	59.6	67.2	71.2	72.8	63.6	51.0	40.9	26.9	50.2
Panguitch	26.3	28.8	39.7	40.5	54.8	61.5	65.7	65.1	59.2	45.7	36.6	25.4	45.8
Richfield	29.0	32.3	44.0	45.4	58.0	65.2	68.7	69.7	62.0	49.6	39.6	27.1	49.2
Average	***28.2***	***30.5***	***42.7***	***43.8***	***58.0***	***64.2***	***68.7***	***69.3***	***61.8***	***48.8***	***39.3***	***26.9***	***48.5***
NORTHERN MOUNTAINS													
Heber	24.2	23.7	38.1	43.3	56.6	63.2	67.5	69.0	61.6	48.3	36.9	25.9	46.5
Olmstead Powerhouse	30.4	32.3	46.6	47.0	62.5	67.3	73.2	74.0	66.1	51.9	41.0	29.5	51.8
Scofield-Skyline Mine	21.0	21.1	31.2	31.8	45.2	53.9	57.6	58.4	51.0	39.3	29.5	20.1	38.3
Silver Lake Brighton	19.7	18.7	28.1	29.8	42.9	51.5	56.5	58.4	49.5	37.8	26.7	20.2	36.7
Woodruff	15.6	14.3	30.5	35.9	50.5	57.0	60.3	62.2	54.6	40.9	27.8	12.7	38.5
Average	***22.2***	***22.0***	***34.9***	***37.6***	***51.5***	***58.6***	***63.0***	***64.4***	***56.6***	***43.6***	***32.4***	***21.7***	***42.4***
UINTAH BASIN													
Duchesne	20.0	20.5	36.9	43.2	57.3	65.2	68.1	68.1	60.4	47.1	32.6	19.3	44.9
Fort Duchesne	17.8	21.2	37.2	44.7	58.4	68.7	71.0	71.0	62.1	48.9	34.0	22.6	46.5
Jensen	18.9	21.0	37.9	44.3	59.6	68.3	71.0	71.0	63.4	49.1	35.0	21.9	46.8
Vernal	20.6	22.3	37.7	42.4	56.1	65.7	69.2	68.8	61.0	46.7	32.8	20.9	45.4
Average	***19.3***	***21.3***	***37.4***	***43.7***	***57.9***	***67.0***	***69.8***	***69.7***	***61.7***	***48.0***	***33.6***	***21.2***	***45.9***
SOUTHEAST													
Arches Nat'l Park	33.7	37.2	49.6	52.0	67.3	77.1	80.6	79.5	70.8	56.1	42.2	32.2	56.5
Blanding	30.4	34.9	46.5	47.0	62.3	69.7	74.5	72.3	67.8	52.0	41.4	32.0	52.6
Ferron	24.3	27.6	42.2	45.1	60.6	67.9	71.4	69.5	62.2	50.4	36.5	27.9	48.8
Green River	25.3	35.2	47.1	51.4	66.7	73.0	77.6	77.2	69.3	52.6	39.1	30.1	53.7
Hanksville	25.4	35.2	48.0	51.0	65.6	73.9	77.0	75.9	68.1	52.8	39.5	29.7	53.5
Moab	34.8	37.4	50.7	53.4	68.3	76.8	80.5	79.7	71.1	56.6	42.9	32.7	57.1
Average	***29.0***	***34.6***	***47.4***	***50.0***	***65.1***	***73.1***	***76.9***	***75.7***	***68.2***	***53.4***	***40.3***	***30.8***	***53.7***

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Normal Mean Monthly Temperature (°F), Utah, 1961-90

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	26.2	32.5	40.7	48.2	57.1	65.7	73.4	71.3	61.6	49.8	37.9	27.4	49.3
Delta	24.3	32.2	40.2	48.0	57.5	67.3	75.1	72.8	62.5	50.9	37.6	26.4	49.6
Enterprise Beryl	26.3	32.3	38.6	45.7	54.3	63.0	70.2	68.5	59.4	48.7	36.9	27.7	47.6
Eskdale	27.8	33.6	41.7	48.7	57.8	67.5	75.0	72.5	62.5	50.5	38.5	28.1	50.4
Modena	27.8	33.4	39.4	46.7	55.3	65.1	72.0	70.2	61.2	50.5	38.3	29.0	49.1
Rosette	24.2	28.7	37.4	47.8	57.4	66.3	73.0	70.8	61.1	49.3	34.6	20.4	47.6
Average	***26.1***	***32.1***	***39.7***	***47.5***	***56.6***	***65.8***	***73.1***	***71.0***	***61.4***	***50.0***	***37.3***	***26.5***	***48.9***
DIXIE													
St. George	40.3	46.5	52.8	60.5	70.0	79.3	85.6	83.4	75.0	63.3	50.1	40.6	62.3
Zion Nat'l Park	40.2	45.0	49.7	57.5	67.1	77.5	83.9	81.5	74.2	63.3	49.8	41.1	60.9
Average	***40.3***	***45.8***	***51.3***	***59.0***	***68.6***	***78.4***	***84.8***	***82.5***	***74.6***	***63.3***	***50.0***	***40.9***	***61.6***
NORTH CENTRAL													
Corinne	24.0	30.4	39.0	47.4	56.9	65.9	73.7	71.8	61.4	50.0	37.0	26.8	48.7
Farmington	28.6	33.7	41.7	49.5	58.3	67.8	76.0	73.8	64.2	51.8	39.8	29.3	51.2
Logan USU	23.4	28.5	37.0	46.2	55.5	64.4	72.9	71.4	61.2	50.0	36.9	25.7	47.8
Ogden Pioneer	27.7	33.4	41.1	49.6	58.9	68.6	76.9	74.7	64.4	52.9	39.8	29.6	51.5
Pleasant Grove	28.1	33.8	41.3	48.9	57.8	66.7	74.4	72.3	63.1	52.1	40.1	30.1	50.7
Prove BYU	27.9	32.6	43.5	52.1	59.6	69.7	76.3	74.9	65.1	52.7	41.0	30.7	52.2
SLC Airport	27.9	34.1	41.8	49.6	58.8	69.0	77.8	75.5	64.9	52.9	40.6	29.7	51.9
Tooele	28.5	33.7	40.5	48.6	57.9	67.6	75.8	73.5	63.4	51.6	39.2	29.6	50.8
Tremonton	23.5	28.8	40.2	49.4	56.7	66.7	74.2	73.0	62.8	50.3	37.2	25.8	49.1
Trenton	20.0	26.2	37.5	46.3	52.9	62.1	68.4	66.8	57.9	47.1	34.2	23.8	45.3
Average	***26.0***	***31.5***	***40.4***	***48.8***	***57.3***	***66.9***	***74.6***	***72.8***	***62.8***	***51.1***	***38.6***	***28.1***	***49.9***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	22.6	25.3	30.6	38.2	47.0	56.4	62.8	60.6	53.0	43.2	31.6	23.8	41.3
Cedar City FAA	29.5	34.6	40.1	47.5	56.5	66.7	74.1	72.0	63.0	51.7	39.7	30.7	50.5
Escalante	27.6	34.0	40.4	48.0	56.8	66.1	72.3	69.7	61.5	51.1	39.2	29.6	49.7
Fillmore	27.9	34.2	41.1	48.8	57.7	67.4	75.4	73.3	64.2	52.3	39.6	29.2	50.9
Kanab	35.2	39.9	44.5	51.2	60.1	69.4	75.6	73.4	66.2	56.4	44.7	36.4	54.4
Koosharem	23.6	27.8	33.5	40.6	49.5	58.6	65.7	63.4	55.9	45.2	33.7	25.2	43.6
Levan	25.3	31.4	38.8	46.8	55.7	65.4	73.2	71.2	62.2	50.8	38.3	27.3	48.9
Manti	25.4	30.7	37.9	45.9	54.4	63.6	70.7	68.6	59.9	49.6	37.3	27.2	47.6
Nephi	27.5	33.0	40.1	48.1	57.2	67.0	75.2	73.1	63.5	51.9	39.5	29.3	50.5
Panguitch	24.0	29.0	35.0	42.3	50.6	59.2	65.7	63.6	56.1	46.2	34.8	25.6	44.3
Richfield	27.0	32.7	39.6	46.9	55.2	64.0	71.0	68.9	60.4	49.7	37.9	28.7	48.5
Average	***26.9***	***32.1***	***38.3***	***45.8***	***54.6***	***64.0***	***71.1***	***68.9***	***60.5***	***49.8***	***37.8***	***28.5***	***48.2***
NORTHERN MOUNTAINS													
Heber	21.2	26.3	34.8	43.5	51.9	60.1	67.4	65.7	57.1	47.0	34.9	24.0	44.5
Olmstead Powerhouse	28.0	32.9	41.5	50.6	57.5	68.8	75.1	73.4	64.3	53.2	39.9	30.4	51.3
Scofield-Skyline Mine	20.5	20.8	27.8	37.1	42.8	54.1	59.7	58.2	49.4	39.8	28.2	19.9	38.2
Silver Lake Brighton	19.6	21.1	25.0	32.2	40.7	50.1	58.2	56.3	48.4	38.6	27.0	19.9	36.4
Woodruff	15.5	19.0	28.6	38.8	47.5	55.9	62.8	60.6	51.7	41.4	28.6	17.3	39.0
Average	***21.0***	***24.0***	***31.5***	***40.4***	***48.1***	***57.8***	***64.6***	***62.8***	***54.2***	***44.0***	***31.7***	***22.3***	***41.9***
UINTAH BASIN													
Duchesne	18.4	25.4	36.6	46.8	56.0	64.7	71.2	69.4	59.6	48.1	34.2	21.1	46.0
Fort Duchesne	14.4	21.6	35.7	46.3	56.0	65.0	72.1	69.5	59.4	47.8	33.6	19.7	45.1
Jensen	14.9	22.8	36.4	47.0	56.7	65.2	72.0	69.3	59.8	48.0	33.7	19.4	45.4
Vernal	15.2	23.5	36.4	47.1	56.1	65.5	72.3	69.9	60.6	48.3	33.6	20.1	45.7
Average	***15.7***	***23.3***	***36.3***	***46.8***	***56.2***	***65.1***	***71.9***	***69.5***	***59.9***	***48.1***	***33.8***	***20.1***	***45.6***
SOUTHEAST													
Arches Nat'l Park	29.6	37.5	48.1	56.8	66.0	76.9	82.8	80.6	70.9	56.8	44.1	33.2	56.9
Blanding	27.3	33.7	39.6	47.4	57.1	67.2	73.2	70.9	62.8	51.7	39.1	29.8	50.0
Ferron	22.8	29.4	37.6	46.5	56.2	65.6	72.4	69.9	61.2	50.1	36.8	25.7	47.8
Green River	22.8	33.2	42.9	52.4	61.9	71.6	78.6	75.6	65.3	52.9	39.1	27.1	51.9
Hanksville	25.2	34.4	43.9	53.2	63.0	73.0	79.6	76.8	66.7	53.7	39.3	27.9	53.1
Moab	30.0	38.6	48.1	56.9	66.2	75.3	81.6	79.7	70.1	57.6	44.4	33.2	56.8
Average	***26.3***	***34.5***	***43.4***	***52.2***	***61.7***	***71.6***	***78.0***	***75.6***	***66.2***	***53.8***	***40.5***	***29.5***	***52.8***

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Total Precipitation (Inches), Utah, 1997

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	0.92	0.82	0.00	1.17	1.01	2.56	0.66	1.00	1.32	0.19	0.68	0.26	10.59
Delta	1.37	0.77	0.06	1.16	0.87	0.83	0.47	1.48	1.43	0.59	0.36	0.23	9.62
Enterprise Beryl	0.21	0.20	0.05	0.98	0.83	0.22	0.47	1.77	3.93	0.23	0.55	0.32	9.76
Eskdale	0.76	0.29	0.00	0.71	1.20	1.57	0.59	0.76	1.42	0.30	0.86	0.08	8.54
Modena	1.23	0.51	0.00	1.19	0.61	0.29	0.59	1.08	4.86	1.07	0.83	0.14	12.40
Rosette	2.32	0.03	0.32	0.52	1.38	2.55	0.96	0.90	2.10	0.54	0.61	0.25	12.48
Average	***1.14***	***0.44***	***0.07***	***0.96***	***0.98***	***1.34***	***0.62***	***1.17***	***2.51***	***0.49***	***0.65***	***0.21***	***10.57***
DIXIE													
St. George	3.86	0.61	0.00	0.36	0.19	0.07	0.03	1.64	2.72	0.14	0.75	0.34	10.71
Zion Nat'l Park	4.44	0.79	0.00	0.67	0.59	0.11	1.90	2.10	4.29	0.81	1.24	0.58	17.52
Average	***4.15***	***0.70***	***0.00***	***0.52***	***0.39***	***0.09***	***0.97***	***1.87***	***3.51***	***0.48***	***1.00***	***0.46***	***14.12***
NORTH CENTRAL													
Corinne	3.13	0.95	0.52	1.85	2.21	1.98	1.53	1.60	0.83	1.02	1.01	0.88	17.51
Farmington	3.75	1.60	0.62	2.82	2.87	2.96	1.17	0.57	1.47	2.05	1.25	1.48	22.61
Logan USU	3.94	0.60	0.76	2.92	2.65	1.75	2.08	1.76	1.21	2.22	0.85	1.58	22.32
Ogden Pioneer	4.09	1.05	1.04	1.83	2.51	2.75	1.43	2.09	2.55	1.51	0.92	2.78	24.55
Pleasant Grove	4.31	1.54	0.18	1.49	1.79	1.42	0.70	1.10	2.25	1.63	1.65	1.11	19.17
Provo BYU	4.32	1.66	0.54	1.84	2.06	0.85	0.54	0.80	2.64	1.71	1.70	1.58	20.24
SLC Airport	2.27	1.62	0.97	2.22	1.77	1.73	0.84	0.63	1.50	1.87	0.87	0.64	16.93
Tooele	3.01	3.11	1.16	2.22	2.47	2.57	1.50	1.92	2.82	1.79	1.38	2.79	26.74
Tremonton	3.43	0.41	0.45	1.47	2.17	1.73	2.79	1.94	0.99	1.06	0.47	0.60	17.51
Trenton	5.25	0.75	1.19	2.60	2.83	1.90	2.69	1.24	1.89	1.94	0.56	0.91	23.75
Average	***3.75***	***1.33***	***0.74***	***2.13***	***2.33***	***1.96***	***1.53***	***1.37***	***1.82***	***1.68***	***1.07***	***1.44***	***21.13***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	2.86	0.67	0.08	2.35	0.95	1.50	0.72	5.35	5.40	0.84	0.46	0.65	21.83
Cedar City FAA	1.91	0.82	0.15	1.32	0.69	0.79	0.68	0.98	2.17	0.15	0.83	0.23	10.72
Escalante	1.77	0.57	0.00	1.55	0.10	0.46	0.27	2.75	4.90	0.64	0.28	0.38	13.67
Fillmore	2.11	2.30	0.06	2.29	1.75	1.00	1.18	2.33	2.01	1.22	1.09	1.05	18.39
Kanab	5.23	1.29	0.00	0.89	0.40	1.34	0.58	4.07	9.12	1.76	0.87	1.06	26.61
Koosharem	1.60	0.26	0.00	0.94	0.17	1.73	2.65	0.88	2.67	0.88	0.43	0.34	12.55
Levan	3.58	1.23	0.12	2.26	1.81	1.09	0.32	1.57	2.66	1.05	1.44	1.03	18.16
Manti	2.31	1.23	0.02	1.40	1.85	1.08	0.52	1.10	3.07	0.75	0.95	0.56	14.84
Nephi	3.59	1.40	0.14	2.41	1.57	1.11	0.57	1.73	2.05	1.17	1.39	0.68	17.81
Panguitch	1.74	0.10	0.00	0.99	0.10	1.65	1.08	2.29	4.41	0.22	0.49	0.14	13.21
Richfield	1.34	0.60	0.00	0.73	0.64	1.10	0.88	1.26	1.67	0.30	0.45	0.29	9.26
Average	***2.55***	***0.95***	***0.05***	***1.56***	***0.91***	***1.17***	***0.86***	***2.21***	***3.65***	***0.82***	***0.79***	***0.58***	***16.10***
NORTHERN MOUNTAINS													
Heber	3.68	1.31	0.94	1.36	1.66	1.69	0.50	1.43	2.71	0.83	1.13	0.36	17.60
Olmstead Powerhouse	4.20	1.58	0.26	1.50	2.02	0.99	0.19	0.89	2.71	1.93	1.89	1.39	19.55
Scofield-Skyline Mine	7.29	2.19	0.46	3.78	1.79	0.76	1.65	1.82	6.00	2.12	1.75	1.42	31.03
Silver Lake Brighton	7.75	3.31	2.03	4.80	3.17	3.39	1.56	2.78	4.70	3.75	3.29	2.19	42.72
Woodruff	1.02	0.38	0.22	1.66	1.11	2.22	0.77	2.73	3.77	0.51	0.90	0.65	15.94
Average	***4.79***	***1.75***	***0.78***	***2.62***	***1.95***	***1.81***	***0.93***	***1.93***	***3.98***	***1.83***	***1.79***	***1.20***	***25.37***
UINTAH BASIN													
Duchesne	1.76	0.49	0.09	2.43	0.83	1.63	1.28	4.16	3.26	0.77	0.97	0.32	17.99
Fort Duchesne	0.99	0.56	0.23	0.74	1.20	1.17	0.19	1.78	3.42	0.72	0.40	0.23	11.63
Jensen	1.32	0.64	0.03	1.65	0.74	0.65	0.35	1.95	3.05	0.77	0.66	0.59	12.40
Vernal	1.30	0.70	0.05	1.20	0.61	0.97	0.34	2.41	2.86	0.67	0.31	0.66	12.08
Average	***1.34***	***0.60***	***0.10***	***1.51***	***0.85***	***1.11***	***0.54***	***2.58***	***3.15***	***0.73***	***0.59***	***0.45***	***13.53***
SOUTHEAST													
Arches Nat'l Park	1.09	0.36	0.36	1.10	0.59	0.48	1.06	1.21	2.15	0.83	0.37	0.33	9.93
Blanding	3.15	1.77	0.05	1.99	1.18	0.48	2.94	2.90	1.87	1.66	0.76	1.30	20.05
Ferron	1.36	0.16	0.00	0.86	0.58	1.18	1.90	2.08	4.36	0.30	0.34	0.13	13.25
Green River	0.81	0.81	0.00	1.88	0.25	0.50	0.92	1.12	1.93	0.47	0.41	0.16	9.26
Hanksville	1.68	0.35	0.05	1.54	0.19	0.64	0.81	1.25	1.64	0.40	0.14	0.01	8.70
Moab	0.76	0.93	0.24	1.33	0.94	0.18	0.92	1.89	3.36	1.17	0.78	0.60	13.10
Average	***1.48***	***0.73***	***0.12***	***1.45***	***0.62***	***0.58***	***1.43***	***1.74***	***2.55***	***0.81***	***0.47***	***0.42***	***12.38***

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Normal Precipitation (Inches), Utah, 1961-90

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	0.29	0.33	0.41	0.47	0.81	0.73	0.53	0.66	0.60	0.66	0.34	0.28	6.11
Delta	0.50	0.56	0.85	0.79	0.90	0.47	0.53	0.57	0.81	0.81	0.71	0.62	8.12
Enterprise Beryl	0.68	0.83	1.10	0.90	0.66	0.46	1.18	1.18	0.94	0.81	0.86	0.62	10.22
Eskdale	0.24	0.33	0.66	0.59	0.60	0.59	0.56	0.55	0.73	0.64	0.40	0.31	6.20
Modena	0.66	0.86	0.94	0.88	0.66	0.39	1.39	1.29	1.02	0.95	0.70	0.58	10.32
Rosette	0.84	0.82	0.87	0.90	1.45	1.29	1.03	1.06	0.70	0.94	0.87	0.80	11.57
Average	***0.54***	***0.62***	***0.81***	***0.76***	***0.85***	***0.66***	***0.87***	***0.89***	***0.80***	***0.80***	***0.65***	***0.54***	***8.76***
DIXIE													
St. George	1.07	0.84	1.11	0.51	0.39	0.17	0.60	0.76	0.54	0.52	0.84	0.71	8.06
Zion Nat'l Park	1.59	1.60	2.05	1.15	0.84	0.48	1.25	1.79	1.00	0.92	1.46	1.28	15.42
Average	***1.33***	***1.22***	***1.58***	***0.83***	***0.62***	***0.33***	***0.93***	***1.28***	***0.77***	***0.72***	***1.15***	***1.00***	***11.74***
NORTH CENTRAL													
Corinne	1.42	1.56	1.54	1.79	1.91	1.34	0.77	0.89	1.63	1.64	1.59	1.55	17.63
Farmington	1.88	1.89	2.44	2.76	2.71	1.48	0.83	0.99	1.65	2.01	1.96	2.00	22.60
Logan USU	1.38	1.65	2.02	2.15	2.04	1.57	0.78	0.97	1.62	1.87	1.73	1.72	19.47
Ogden Pioneer	1.99	1.92	2.32	2.63	2.51	1.56	0.83	1.01	1.73	1.93	2.06	2.13	22.62
Pleasant Grove	1.58	1.55	1.81	1.89	1.65	0.97	0.78	0.83	1.27	1.67	1.51	1.59	17.10
Provo BYU	1.59	1.94	2.50	1.77	2.12	1.21	1.29	1.41	2.08	2.13	2.05	1.91	21.99
SLC Airport	1.11	1.24	1.91	2.12	1.80	0.93	0.81	0.86	1.28	1.44	1.29	1.40	16.20
Tooele	1.08	1.33	2.32	2.49	1.91	1.12	0.92	0.94	1.42	1.81	1.69	1.48	18.49
Tremonton	1.36	1.46	1.88	1.59	2.61	1.00	1.49	0.76	1.89	1.45	1.63	1.45	18.58
Trenton	1.34	1.64	1.97	1.89	2.63	1.11	0.94	0.98	1.63	1.56	1.68	1.41	18.78
Average	***1.47***	***1.62***	***2.07***	***2.11***	***2.19***	***1.23***	***0.94***	***0.96***	***1.62***	***1.75***	***1.72***	***1.66***	***19.35***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	1.16	1.36	1.53	0.95	1.03	0.57	1.51	2.20	1.70	1.20	1.20	1.12	15.53
Cedar City FAA	0.69	0.89	1.36	1.10	0.84	0.43	1.09	1.47	0.98	0.95	1.00	0.70	11.50
Escalante	0.78	0.64	0.90	0.50	0.68	0.41	1.06	1.51	1.04	0.98	0.83	0.70	10.03
Fillmore	1.27	1.26	2.08	1.82	1.43	0.90	0.75	0.87	1.21	1.38	1.46	1.50	15.93
Kanab	1.50	1.32	1.60	0.92	0.72	0.32	1.01	1.49	0.94	0.98	1.27	1.24	13.31
Koosharem	0.54	0.51	0.73	0.61	0.82	0.60	1.12	1.46	1.05	0.76	0.57	0.61	9.38
Levan	1.23	1.24	1.65	1.52	1.45	0.87	0.82	0.97	1.38	1.36	1.29	1.39	15.17
Manti	0.98	1.02	1.53	1.41	1.28	0.81	0.82	0.98	1.40	1.29	1.14	1.06	13.72
Nephi	1.14	1.19	1.71	1.51	1.39	0.82	0.86	1.01	1.19	1.26	1.39	1.33	14.80
Panguitch	0.48	0.61	0.79	0.67	0.82	0.63	1.50	1.78	1.05	0.71	0.78	0.51	10.33
Richfield	0.56	0.58	0.73	0.75	0.84	0.58	0.79	0.70	0.93	0.84	0.68	0.59	8.57
Average	***0.94***	***0.97***	***1.33***	***1.07***	***1.03***	***0.63***	***1.03***	***1.31***	***1.17***	***1.06***	***1.06***	***0.98***	***12.58***
NORTHERN MOUNTAINS													
Heber	1.78	1.56	1.37	1.37	1.23	0.90	0.87	0.98	1.26	1.45	1.64	1.62	16.01
Olmstead Powerhouse	1.91	2.02	2.54	1.63	2.38	0.75	0.92	1.27	2.01	1.94	2.19	1.57	21.14
Scofield-Skyline Mine	1.83	3.12	2.87	1.52	1.68	1.01	1.71	1.38	1.73	1.95	2.88	1.98	23.68
Silver Lake Brighton	4.92	4.76	5.31	4.42	2.96	1.84	1.69	1.95	2.58	3.49	4.87	4.90	43.68
Woodruff	0.43	0.45	0.57	0.92	0.89	1.05	0.72	0.69	1.16	0.93	0.65	0.58	9.04
Average	***2.17***	***2.38***	***2.53***	***1.97***	***1.83***	***1.11***	***1.18***	***1.25***	***1.75***	***1.95***	***2.45***	***2.13***	***22.71***
UINTAH BASIN													
Duchesne	0.43	0.50	0.64	0.84	0.91	0.90	0.97	1.00	1.17	0.94	0.52	0.73	9.55
Fort Duchesne	0.35	0.32	0.46	0.59	0.72	0.63	0.61	0.66	0.70	0.86	0.37	0.45	6.72
Jensen	0.46	0.52	0.61	0.72	0.77	0.64	0.66	0.59	0.91	1.02	0.59	0.63	8.13
Vernal	0.39	0.36	0.51	0.61	0.73	0.64	0.59	0.66	0.70	0.82	0.42	0.37	6.80
Average	***0.41***	***0.43***	***0.56***	***0.69***	***0.78***	***0.70***	***0.71***	***0.73***	***0.87***	***0.91***	***0.48***	***0.55***	***7.80***
SOUTHEAST													
Arches Nat' Park	0.47	0.32	0.91	0.83	0.65	0.37	1.01	1.09	0.73	1.31	0.79	0.49	8.97
Blanding	1.25	0.91	0.95	0.75	0.62	0.46	1.32	1.43	1.28	1.36	1.08	1.18	12.60
Ferron	0.62	0.55	0.66	0.49	0.72	0.49	1.03	1.09	0.87	0.79	0.53	0.56	8.40
Green River	0.40	0.32	0.59	0.50	0.61	0.41	0.57	0.74	0.71	0.87	0.41	0.39	6.52
Hanksville	0.38	0.22	0.51	0.42	0.49	0.30	0.53	0.73	0.74	0.68	0.38	0.31	5.69
Moab	0.56	0.43	0.85	0.98	0.72	0.48	0.83	0.86	0.75	1.16	0.74	0.65	9.00
Average	***0.61***	***0.46***	***0.75***	***0.66***	***0.64***	***0.42***	***0.88***	***0.99***	***0.85***	***1.03***	***0.66***	***0.60***	***8.53***

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Total Growing Degree Days Base 50, by Months, Utah, 1997

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	19	15	191	181	415	532	626	652	462	251	66	0	3,408
Delta	8	16	214	195	442	512	601	668	468	281	88	2	3,492
Enterprise Beryl	8	30	239	187	446	501	563	588	439	285	111	7	3,402
Eskdale	15	22	214	176	451	561	639	723	504	313	83	0	3,699
Modena	10	43	232	193	456	511	586	624	462	294	99	5	3,512
Rosette	0	1	66	86	319	394	565	593	354	161	32	0	2,567
Average	***10***	***21***	***192***	***169***	***421***	***502***	***596***	***641***	***448***	***264***	***80***	***2***	***3,346***
DIXIE													
St. George	78	146	391	389	697	769	867	895	766	483	257	71	5,807
Zion Nat'l Park	58	117	363	340	655	697	821	842	699	446	221	57	5,311
Average	***68***	***131***	***377***	***364***	***676***	***733***	***844***	***868***	***732***	***464***	***239***	***64***	***5,559***
NORTH CENTRAL													
Corinne	8	3	97	119	364	480	573	626	444	161	53	0	2,925
Farmington	9	6	157	160	435	536	696	720	516	286	74	0	3,593
Logan USU	8	0	82	97	338	473	616	676	448	188	26	0	2,950
Ogden Pioneer	8	4	150	143	448	554	675	742	498	244	47	0	3,511
Pleasant Grove	8	7	170	145	417	558	665	715	481	275	69	2	3,511
Provo BYU	12	14	199	173	450	576	677	735	522	290	75	2	3,721
SLC Airport	9	11	154	158	454	579	699	793	526	259	60	0	3,701
Tooele	11	7	151	155	430	577	682	749	493	263	59	0	3,575
Tremonton	3	0	113	134	375	517	651	693	466	203	51	0	3,203
Trenton	2	0	83	99	328	441	541	561	393	188	35	0	2,668
Average	***8***	***5***	***135***	***138***	***404***	***529***	***647***	***701***	***479***	***235***	***55***	***0***	***3,336***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	0	0	59	68	250	332	437	384	251	126	23	0	1,928
Cedar City FAA	13	26	209	158	436	525	643	691	488	288	108	12	3,594
Escalante	6	23	216	185	465	521	613	611	451	275	78	1	3,441
Fillmore	10	12	181	156	413	513	640	706	449	262	73	0	3,413
Kanab	17	58	246	217	476	508	639	662	518	304	127	12	3,780
Koosharem	0	0	116	103	321	367	487	454	313	205	54	0	2,418
Levan	7	9	170	150	396	482	587	629	448	275	84	0	3,235
Manti	0	1	118	117	350	457	565	582	391	238	69	0	2,886
Nephi	6	4	165	145	396	518	628	679	449	258	74	0	3,319
Panguitch	0	12	174	143	396	461	539	523	385	243	60	0	2,936
Richfield	13	13	206	155	400	484	579	592	426	289	84	1	3,240
Average	***6***	***14***	***169***	***145***	***391***	***470***	***578***	***592***	***415***	***251***	***76***	***2***	***3,108***
NORTHERN MOUNTAINS													
Heber	3	0	125	157	400	468	554	565	441	264	68	1	3,044
Olmstead Powerhouse	11	8	203	168	441	508	650	670	495	267	65	1	3,485
Scofield-Skyline Mine	0	0	16	21	162	274	358	345	192	89	9	0	1,464
Silver Lake Brighton	0	0	9	15	112	203	311	310	155	76	5	0	1,193
Woodruff	0	0	30	66	285	336	444	451	286	153	18	0	2,067
Average	***3***	***2***	***76***	***85***	***280***	***358***	***463***	***468***	***314***	***170***	***33***	***0***	***2,250***
UINTAH BASIN													
Duchesne	0	0	95	131	349	472	562	559	365	202	21	0	2,754
Fort Duchesne	0	0	93	154	400	537	588	601	413	239	30	0	3,055
Jensen	1	0	129	160	423	537	605	606	435	252	44	0	3,189
Vernal	0	0	103	124	362	489	573	558	382	196	27	0	2,812
Average	***0***	***0***	***105***	***142***	***383***	***509***	***582***	***581***	***399***	***222***	***30***	***0***	***2,952***
SOUTHEAST													
Arches Nat'l Park	20	27	257	250	553	696	782	779	594	352	102	1	4,410
Blanding	3	17	176	167	443	555	677	666	533	249	65	5	3,553
Ferron	0	0	147	140	400	534	631	591	403	246	51	0	3,141
Green River	0	20	239	234	541	527	694	723	584	314	92	2	3,967
Hanksville	5	17	275	242	521	605	670	691	551	325	81	1	3,981
Moab	18	31	294	283	557	663	740	771	610	370	117	0	4,452
Average	***8***	***19***	***231***	***219***	***502***	***597***	***699***	***703***	***546***	***309***	***84***	***1***	***3,917***

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Normal Growing Degree Days Base 50, by Months, Utah, 1961-90

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	13	35	107	204	346	469	643	593	422	248	72	14	3,167
Delta	6	34	107	213	371	514	662	633	452	280	80	11	3,361
Enterprise Beryl	15	37	108	214	357	480	592	569	429	280	93	21	3,195
Eskdale	20	49	125	222	391	519	662	624	460	280	94	21	3,466
Modena	18	40	108	218	369	498	612	587	442	296	94	22	3,304
Rosette	0	15	69	180	377	579	815	747	474	202	30	04	3,492
Average	***12***	***35***	***104***	***209***	***368***	***510***	***664***	***625***	***446***	***264***	***77***	***15***	***3,331***
DIXIE													
St. George	79	157	272	403	568	697	838	812	628	456	220	80	5,208
Zion Nat'l Park	67	120	204	338	539	705	845	818	665	460	192	77	5,030
Average	***73***	***139***	***238***	***370***	***553***	***701***	***841***	***815***	***647***	***458***	***206***	***79***	***5,119***
NORTH CENTRAL													
Corinne	1	13	59	166	329	481	656	623	418	232	37	2	3,016
Farmington	4	22	82	195	360	524	707	669	461	247	60	5	3,338
Logan USU	1	6	38	128	281	450	672	636	390	196	33	2	2,831
Ogden Pioneer	3	18	72	180	356	542	744	703	461	250	57	5	3,391
Pleasant Grove	6	27	91	193	358	506	684	646	452	264	73	10	3,308
Provo BYU	6	30	105	237	382	559	706	680	478	267	80	12	3,542
SLC Airport	4	23	80	183	358	546	750	712	475	253	65	7	3,454
Tooele	6	18	67	168	337	528	743	694	441	222	50	7	3,281
Tremonton	0	9	54	183	307	507	695	667	430	212	37	3	3,103
Trenton	0	6	51	181	283	445	568	545	391	223	38	2	2,733
Average	***3***	***17***	***70***	***181***	***335***	***509***	***692***	***657***	***440***	***237***	***53***	***5***	***3,199***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	2	4	22	85	212	361	465	419	295	159	27	4	2,054
Cedar City FAA	15	39	91	186	343	513	674	639	453	272	89	23	3,336
Escalante	10	32	98	211	368	505	625	580	429	267	80	11	3,216
Fillmore	10	34	98	200	361	525	687	654	470	273	82	12	3,407
Kanab	41	81	149	258	416	550	685	657	505	352	149	54	3,897
Koosharem	6	15	47	126	268	412	525	494	370	219	61	12	2,556
Levan	3	21	83	184	336	487	648	616	444	269	77	7	3,175
Manti	4	15	67	162	306	458	612	571	394	235	62	7	2,893
Nephi	7	26	92	199	359	510	674	643	464	286	88	13	3,360
Panguitch	9	22	70	166	305	439	537	500	388	255	80	14	2,785
Richfield	14	38	107	209	353	484	607	578	444	289	95	21	3,238
Average	***11***	***30***	***84***	***181***	***330***	***477***	***613***	***577***	***423***	***262***	***81***	***16***	***3,083***
NORTHERN MOUNTAINS													
Heber	1	8	44	142	289	419	556	527	383	238	55	5	2,667
Olmstead PH	5	22	79	218	337	538	688	659	465	266	70	12	3,357
Scofield-Skyline Mine	0	0	6	46	112	286	375	347	202	88	10	0	1,474
Silver Lake Brighton	1	1	4	20	86	211	347	312	182	70	7	1	1,240
Woodruff	0	2	18	94	220	342	492	466	317	174	27	1	2,152
Average	***1***	***7***	***30***	***104***	***209***	***359***	***492***	***462***	***310***	***167***	***34***	***4***	***2,178***
UINTAH BASIN													
Duchesne	2	10	66	187	352	469	613	583	396	216	37	1	2,931
Fort Duchesne	1	7	61	183	341	470	589	557	400	223	41	1	2,875
Jensen	1	11	76	210	373	486	608	549	423	250	48	2	3,035
Vernal	1	11	67	187	316	455	580	561	390	220	42	2	2,831
Average	***1***	***10***	***67***	***192***	***346***	***470***	***597***	***582***	***403***	***227***	***42***	***1***	***2,918***
SOUTHEAST													
Arches Nat'l Pk	7	53	172	322	508	694	830	798	593	342	113	7	4,438
Blanding	4	21	76	184	351	520	662	619	431	247	61	6	3,181
Ferron	3	14	64	165	321	485	636	598	401	238	55	3	2,981
Green River	6	43	142	278	434	568	708	649	486	309	88	6	3,716
Hanksville	12	51	167	304	473	594	717	684	518	341	104	11	3,974
Moab	16	67	194	339	514	644	776	744	573	385	137	20	4,408
Average	***8***	***41***	***136***	***265***	***433***	***584***	***721***	***682***	***500***	***310***	***93***	***9***	***3,783***

Source: Utah Climate Center, Utah State University, Utah 84322-4825

Total Growing Degree Days Base 40, by Months, Utah, 1997

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	76	81	343	331	597	721	795	831	646	407	182	25	5,032
Delta	50	67	356	330	584	696	767	847	660	420	217	28	5,020
Enterprise Beryl	68	111	382	324	559	625	672	753	631	427	245	67	4,863
Eskdale	88	81	370	314	616	746	806	896	688	476	214	40	5,332
Modena	76	134	383	336	582	661	740	801	666	448	238	64	5,125
Rosette	9	26	170	199	522	640	782	804	570	304	109	8	4,140
Average	***61***	***83***	***334***	***306***	***577***	***681***	***760***	***822***	***643***	***413***	***201***	***38***	***4,919***
DIXIE													
St. George	223	288	555	567	875	942	1,035	1,065	934	653	429	213	7,775
Zion Nat'l Park	184	253	558	523	839	872	991	1,012	890	656	407	178	7,360
Average	***203***	***271***	***556***	***545***	***857***	***907***	***1,013***	***1,038***	***912***	***654***	***418***	***195***	***7,568***
NORTH CENTRAL													
Corinne	42	53	220	271	582	699	759	817	659	298	150	6	4,552
Farmington	53	72	296	313	636	744	872	897	728	453	209	25	5,296
Logan USU	36	14	192	224	578	715	823	881	682	334	96	3	4,575
Ogden Pioneer	44	38	295	302	689	784	873	934	730	416	151	15	5,269
Pleasant Grove	42	45	315	302	625	761	846	901	700	444	187	20	5,184
Provo BYU	56	68	353	332	662	780	856	910	737	457	201	28	5,438
SLC Airport	64	62	300	323	677	804	891	970	747	429	186	15	5,466
Tooele	62	53	296	321	666	797	865	934	706	435	172	19	5,322
Tremonton	25	29	238	293	598	747	847	888	696	363	152	12	4,885
Trenton	18	9	185	220	510	643	718	757	586	321	115	3	4,083
Average	***44***	***44***	***269***	***290***	***622***	***747***	***835***	***889***	***697***	***395***	***162***	***14***	***5,007***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	11	19	172	153	405	496	615	630	455	257	87	9	3,307
Cedar City FAA	66	93	356	287	609	714	808	873	700	447	249	84	5,284
Escalante	71	103	361	340	625	698	784	799	687	441	208	69	5,183
Fillmore	60	58	334	309	629	710	819	899	687	436	185	17	5,140
Kanab	86	171	394	385	660	684	808	855	759	476	274	107	5,656
Koosharem	13	27	255	210	466	523	655	656	540	351	152	28	3,871
Levan	52	60	309	292	569	673	753	810	633	416	209	24	4,797
Manti	25	16	250	242	548	667	764	801	626	389	168	13	4,508
Nephi	41	40	306	282	598	723	804	869	668	421	190	27	4,967
Panguitch	36	68	318	263	527	563	642	659	581	391	169	40	4,255
Richfield	59	72	357	295	558	661	733	779	634	437	201	40	4,823
Average	***47***	***66***	***310***	***278***	***563***	***646***	***744***	***784***	***633***	***405***	***190***	***41***	***4,708***
NORTHERN MOUNTAINS													
Heber	28	15	257	285	529	605	681	737	616	408	169	22	4,351
Olmstead Powerhouse	60	47	353	309	648	724	823	849	700	423	186	38	5,157
Scofield-Skyline Mine	12	6	92	83	294	441	552	571	365	200	51	5	2,669
Silver Lake Brighton	9	5	64	69	240	375	534	571	328	179	37	10	2,420
Woodruff	6	2	112	162	436	525	603	640	480	285	60	0	3,309
Average	***23***	***15***	***176***	***182***	***429***	***534***	***638***	***673***	***498***	***299***	***100***	***15***	***3,581***
UINTAH BASIN													
Duchesne	10	3	207	259	542	684	763	777	609	350	85	0	4,288
Fort Duchesne	15	2	200	289	575	729	748	774	629	392	102	1	4,453
Jensen	12	5	249	294	584	712	767	798	661	409	124	2	4,615
Vernal	8	6	218	239	526	671	741	760	607	348	94	1	4,217
Average	**11**	**4**	**218**	**270**	**557**	**699**	**755**	**777**	**626**	**375**	**101**	**1**	**4,393**
SOUTHEAST													
Arches Nat'l Pk	95	136	405	409	728	869	955	956	799	516	233	40	6,139
Blanding	47	93	319	314	644	748	859	860	757	434	196	67	5,334
Ferron	21	23	269	272	623	738	828	807	651	422	149	20	4,820
Green River	34	112	386	395	711	676	867	901	792	475	222	62	5,630
Hanksville	59	108	424	391	663	783	837	872	756	483	215	72	5,661
Moab	109	150	448	444	726	833	910	942	806	535	258	69	6,227
Average	***61***	***103***	***375***	***371***	***682***	***774***	***876***	***889***	***760***	***477***	***212***	***55***	***5,635***

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Normal Growing Degree Days Base 40, by Months, Utah, 1961-90

Division and Station	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
WESTERN													
Callao	56	110	236	351	520	648	815	758	577	400	182	58	4,708
Delta	40	106	231	356	536	682	834	804	612	432	186	54	4,871
Enterprise Beryl	71	117	234	356	498	600	737	724	567	428	207	88	4,625
Eskdale	83	139	264	373	550	679	831	788	610	436	213	86	5,051
Modena	78	125	234	358	511	632	770	750	583	439	209	91	4,779
Rosette	14	40	120	242	436	597	801	767	566	344	112	27	4,066
Average	***57***	***106***	***220***	***339***	***508***	***640***	***798***	***765***	***586***	***413***	***185***	***67***	***4,683***
DIXIE													
St. George	212	294	437	575	748	861	1,004	981	789	618	375	215	7,107
Zion Nat'l Park	192	258	378	528	734	875	1,016	991	842	672	367	205	7,058
Average	***202***	***276***	***407***	***551***	***741***	***868***	***1,010***	***986***	***816***	***645***	***371***	***210***	***7,082***
NORTH CENTRAL													
Corinne	15	60	167	314	517	670	832	802	593	389	126	25	4,510
Farmington	35	86	210	358	556	719	882	846	652	421	166	39	4,970
Logan USU	16	38	122	269	487	672	865	836	605	368	111	24	4,414
Ogden Pioneer	32	77	190	345	571	752	923	890	672	437	158	41	5,087
Pleasant Grove	40	95	215	348	544	694	863	828	637	431	180	54	4,927
Provo BYU	41	90	239	410	578	743	882	855	667	438	191	56	5,187
SLC Airport	34	87	203	345	563	747	927	895	675	437	172	41	5,123
Tooele	41	78	180	329	555	744	929	891	662	406	148	46	5,009
Tremonton	9	47	163	346	514	717	885	857	637	379	125	22	4,698
Trenton	10	41	153	322	442	595	724	696	532	371	119	25	4,031
Average	***27***	***70***	***184***	***338***	***533***	***705***	***871***	***840***	***633***	***408***	***149***	***37***	***4,796***
SOUTH CENTRAL													
Bryce Canyon Nat'l Pk	29	41	93	203	362	519	655	617	457	302	103	38	3,418
Cedar City FAA	75	120	211	334	524	687	853	828	640	435	203	94	5,002
Escalante	61	115	228	359	528	663	800	763	602	422	199	76	4,814
Fillmore	57	110	222	357	545	698	858	829	648	441	192	64	5,021
Kanab	138	195	292	410	587	719	859	837	689	520	287	160	5,693
Koosharem	48	71	138	252	417	540	670	646	513	360	155	64	3,875
Levan	37	82	197	326	505	657	822	792	613	420	181	50	4,683
Manti	35	69	174	304	480	640	799	766	580	390	162	47	4,445
Nephi	50	95	210	343	532	680	847	815	631	440	194	66	4,903
Panguitch	58	91	179	302	452	553	674	652	529	404	188	78	4,158
Richfield	70	119	234	356	506	625	768	737	585	439	210	87	4,737
Average	***60***	***101***	***198***	***322***	***494***	***635***	***782***	***753***	***590***	***416***	***188***	***75***	***4,613***
NORTHERN MOUNTAINS													
Heber	21	46	134	276	443	558	702	671	527	385	145	36	3,943
Olmstead Powerhouse	34	80	200	379	531	723	867	843	658	444	170	55	4,982
Scofield-Skyline Mine	16	19	51	144	242	460	600	564	359	208	51	10	2,723
Silver Lake Brighton	15	18	35	93	208	370	568	520	336	183	44	15	2,404
Woodruff	8	19	73	200	371	491	638	603	460	310	86	16	3,285
Average	***19***	***36***	***98***	***220***	***359***	***520***	***675***	***640***	***468***	***306***	***99***	***26***	***3,467***
UINTAH BASIN													
Duchesne	19	49	170	333	515	646	794	767	566	370	123	21	4,374
Fort Duchesne	10	39	160	324	496	630	749	715	538	367	128	18	4,173
Jensen	13	48	188	355	524	637	773	693	558	398	141	24	4,351
Vernal	12	50	168	320	463	617	745	731	541	361	128	21	4,155
Average	***14***	***46***	***171***	***333***	***500***	***632***	***765***	***726***	***551***	***374***	***130***	***21***	***4,263***
SOUTHEAST													
Arches Nat'l Park	61	150	333	509	714	868	1,001	974	779	525	252	83	6,247
Blanding	39	92	192	331	535	703	844	814	638	417	170	56	4,831
Ferron	26	65	169	308	513	682	821	797	595	394	154	38	4,563
Green River	44	132	284	425	596	727	875	810	629	457	212	60	5,251
Hanksville	65	149	311	454	629	754	887	854	669	491	232	76	5,571
Moab	80	179	355	516	701	816	945	913	736	550	283	102	6,175
Average	***52***	***128***	***274***	***424***	***615***	***758***	***896***	***860***	***674***	***472***	***217***	***69***	***5,440***

Source: Utah Climate Center, Utah State University, Utah 84322-4825

Freeze Dates and Freeze-Free Period, Utah, 1997 and Averages

Division and Station	1997			Averages		
	Last Spring Minimum of 32° or Below	First Fall Minimum of 32° or Below	Number of Days Between Dates	Last Spring Minimum of 32° or Below	First Fall Minimum of 32° or Below	Number of Days Between Dates
WESTERN						
Callao	May 03	Oct 08	158	May 18	Sep 25	130
Delta	May 26	Oct 11	138	May 15	Sep 29	137
Enterprise Beryl	Jul 03	Sep 29	88	Jun 07	Sep 13	98
Eskdale	May 02	Oct 08	159	May 25	Sep 23	122
Modena	May 26	Oct 08	135	May 31	Sep 22	115
Rosette	May 03	Oct 06	156	May 22	Sep 21	122
DIXIE						
St. George	Mar 06	Nov 22	261	Apr 04	Oct 27	209
Zion Nat'l Park	May 02	Oct 25	176	Apr 15	Nov 01	202
NORTH CENTRAL						
Corinne	May 04	Oct 09	158	May 12	Sep 30	142
Farmington	May 02	Oct 12	163	May 03	Oct 11	162
Logan USU	May 03	Oct 13	163	May 06	Oct 10	159
Ogden Pioneer	May 02	Oct 13	164	May 02	Oct 12	164
Pleasant Grove	May 02	Oct 12	163	May 09	Oct 10	155
Provo BYU	Apr 13	Oct 13	183	Apr 25	Oct 15	175
SLC Airport	Apr 13	Oct 13	183	Apr 27	Oct 16	175
Tooele	May 02	Oct 12	163	May 05	Oct 14	164
Tremonton	May 03	Oct 12	162	Apr 27	Oct 09	168
Trenton	May 04	Oct 06	155	May 26	Sep 11	109
SOUTH CENTRAL						
Bryce Canyon Nat'l Pk	Jun 11	Sep 23	104	Jun 18	Sep 04	79
Cedar City FAA	May 26	Oct 12	139	May 18	Oct 01	137
Escalante	May 02	Oct 13	164	May 16	Oct 03	141
Fillmore	May 02	Oct 11	162	May 14	Oct 05	146
Kanab	Apr 24	Oct 12	171	May 06	Oct 18	166
Koosharem	May 26	Sep 21	118	Jun 17	Sep 06	81
Levan	May 26	Sep 28	125	May 22	Sep 29	130
Manti	May 02	Oct 09	160	May 21	Sep 27	130
Nephi	May 03	Oct 12	162	May 15	Sep 30	138
Panguitch	Jul 02	Oct 05	95	Jun 21	Sep 01	73
Richfield	May 26	Oct 09	136	May 25	Sep 20	118
NORTHERN MOUNTAINS						
Heber	May 08	Sep 28	143	Jun 12	Sep 05	85
Olmstead Powerhouse	May 02	Oct 12	163	May 02	Oct 15	168
Scofield-Skyline Mine	Jul 13	Sep 21	70	Jun 24	Sep 07	75
Silver Lake Brighton	Jul 13	Sep 16	65	Jun 29	Aug 23	56
Woodruff	Jul 02	Sep 16	76	Jun 24	Aug 20	58
UINTAH BASIN						
Duchesne	May 03	Oct 09	159	May 23	Sep 21	122
Fort Duchesne	May 04	Oct 09	158	May 22	Sep 21	122
Jensen	May 04	Oct 09	158	May 19	Sep 17	121
Vernal	May 27	Oct 09	135	May 26	Sep 21	118
SOUTHEAST						
Arches Natl Park Hq	Apr 14	Oct 13	182	Apr 08	Oct 26	204
Blanding	May 02	Oct 12	163	May 13	Oct 11	152
Ferron	May 03	Oct 12	162	May 17	Oct 01	138
Green River	Apr 14	Oct 13	182	May 02	Oct 04	157
Hanksville	May 26	Oct 13	140	May 04	Oct 02	152
Moab	Apr 14	Oct 13	182	Apr 17	Oct 17	186

Source: Utah Climate Center, Utah State University, Logan, Utah 84322-4825

Enterprise Budgets

Prepared by the Economics Department, Utah State University

The following crop and livestock enterprise budgets were prepared by the Economics Department at Utah State University Although not guaranteed, these budgets are provided to help farmers and ranchers identify potential alternatives to maximize the profitability of their operation. Actual costs and income will vary from farm to farm; therefore, a column has been provided to adapt the budgets to your farm or ranch. Some numbers may not calculate or total due to rounding.

Any questions or suggestions to these budgets should be referred to the appropriate contact person in the Economics Department at Utah State University, phone 435-797-2310 in Logan.

Budgets included in this years and prior years publications of Utah Agricultural Statistics may be found on the Internet at **http://ext.usu.edu/agecon/** web site location.

Index of Enterprise Budgets by Subject and Year Most Recently Published in Utah Agricultural Statistics

Alfalfa with Oat Hay Budget
Estimated Alfalfa establishment with Oat Hay
Cost and returns per acre, Utah, 1997

Item	Unit	Quantity	Price		Total	Your Farm
				Dollars		
Receipts:						
Oat and alfalfa hay	ton	2.5	60.00		150.00	
Costs:						
Purchases						
Seed						
Alfalfa	lbs	16	2.80		44.80	
Oats	lbs	90	0.15		13.50	
Nitrogen	lbs	100	0.08		8.00	
Phosophate	lbs	25	0.13		3.25	
Operations:	Times	Ownership	Operating	Labor	Total	
			Dollars			
Plow	1	17.99	9.99	3.66	31.64	
Disk and harrow	2	11.12	3.40	1.22	20.36	
Fertilize	1	5.75	1.11	0.37	7.23	
Plant (drill)	1	12.44	1.47	2.51	16.42	
Swathing	2	18.03	3.92	1.34	28.55	
Baling	2	15.00	1.25	1.60	20.70	
Hauling	2	5.37	1.00	1.67	10.71	
Irrigation (4 irrigations)						
Water costs	1 acre			8.50	8.50	
Application (wheel lines)	1 acre			18.53	18.53	
Interest on operating capital for 7 months @ 10.00% ($119.46)					6.97	
Total costs					194.36	
Net returns to management, and capital					(44.36)	

Budget prepared by E. Bruce Godfrey

Grass Hay Budget
Estimated Costs & Receipts for Grass Hay Production
Large Round Bales, Per Acre Basis, Utah, 1997

Item	Unit	Quantity	Price		Total	Your Farm
				Dollars		
Receipts:						
Grass Hay	Tons	1.69	65.00		109.85	
Aftermath	AUM	0.75	10.00		7.50	
Total Receipts					117.35	
Costs:						
Purchases:						
Nitrogen	Lbs	130	0.08		10.40	
Operations:	Times	Ownership	Operating	Labor	Total	
				Dollars		
Fertilizer Application	1	3.50	1.20	0.50	5.20	
Swathing	1	8.65	2.33	1.20	12.18	
Baling	1	14.18	1.01	1.33	16.52	
Hauling	1	1.60	2.65	3.50	7.75	
Irrigation:						
Water Shares	1		30.00		30.00	
Flood	5	0.38	0.62	1.65	11.73	
Interest on purchases for 180 days @ 10.00%					0.51	
Total Costs					94.29	
Return to management and capital					23.06	

Budget prepared by E. Bruce Godfrey

Soybean Budget
Estimated Costs and Returns per acre
Northern Utah, 1997

Item	Unit	Quantity	Price		Total	Your Farm
				Dollars		
Receipts:						
Soybeans	bu	40	7.30		292.00	
Costs:						
Purchases:						
Seed	lbs	65	0.50		32.50	
Fertilizer (11-52-0)	lbs	200	0.14		28.00	
Innoculants applied on seed					1.00	
Herbicides						
Sonolan	pint	2	3.93		7.86	
Lasso	pint	4	2.95		11.80	
Operations:	Times	Ownership	Operating	Labor	Total	
			Dollars			
Plow	1	14.02	8.65	3.82	26.49	
Disk and harrow	1	11.97	3.14	1.36	16.47	
Triple K	1	5.73	1.73	1.03	8.49	
Landplane	1	3.97	2.42	1.43	7.82	
Plant (drill)	1	12.83	5.64	2.15	20.62	
Custom Work						
Fertilize					10.00	
Custom combine					35.00	
Hauling		$0.03 per bushel			1.20	
Irrigation (7 irrigations)						
Water costs	1 acre			8.50	8.50	
Application (siphon tubes)	1 acre			15.53	15.53	
Interest on variable costs @ 10.00% for 7 months $112.74					6.58	
Total costs					237.86	
Net returns to management, and capital					54.14	

Net returns per acre given alternative prices and yields

	Price per bushel				
Bu/acre	$6.30	$6.80	$7.30	$7.80	$8.30
30	($48.56)	($33.56)	($18.56)	($3.56)	$11.44
35	($17.21)	$0.29	$17.79	$35.29	$52.79
40	$14.14	$34.14	$54.14	$74.14	$94.14
45	$45.49	$67.99	$90.49	$112.99	$135.49
50	$76.84	$101.84	$126.84	$151.84	$176.84

Budget prepared by E. Bruce Godfrey, Lyle Holmgren, and David Sass (Pioneer Seed)

Beef Heifer Replacement Budget
Estimated Costs and Returns, Utah, 1997

	Units	Quantity or Weight	$/unit	Total	Your Farm
				Dollars	
Receipts:					
Replacement heifer	head	1	650.00	650.00	
Operating Costs:					
Heifer calf	cwt	500	92.00	460.00	
Feed					
Hay	tons	3.06	80.00	244.80	
Pasture & aftermath	AUM's	4.5	10.00	45.00	
Other direct costs					
Vet & medicine	head	1	10.00	10.00	
Breeding	head	1	15.00	15.00	
Death loss	percent	2.00	7.42	7.42	
Miscellaneous	head	1	10.00	10.00	
Interest @ 9.00% for 16 months				55.20	
Total Cost				847.42	
Net above total cost				(197.42)	

Value of replacement heifer needed to cover costs given alternative hay prices and alternative prices of heifer calves if sold at weaning.
(All other costs remain the same.)

Price of hay per ton	Price of heifer calves per cwt if sold at weaning				
	60	70	80	90	100
	Dollars				
50	576	632	688	744	800
60	607	663	719	775	831
70	638	694	750	806	862
80	668	724	780	836	892
90	699	755	811	867	923
100	729	785	841	897	953

Assumptions:
Death loss 2.00%
Heifer weaned in October, calved in March at age 2 years
Interest charge is based on value of weaned heifer

	Calf	Summer	Bred heifer
Average pounds of hay fed per day	14	0	20
Pounds of gain per day	0.8	1.4	0.8

Heifer fed hay from November through April of each year

Budget prepared by E. Bruce Godrey and Craig Burrell

Feeder Cattle Operation Budget
Estimated costs and returns for a background feeder cattle operation
150 Head operation, Utah, 1997

	Units	Number	Weight	$/unit	$/head	Total	Your Farm
						Dollars	
Receipts:							
Steers	cwt	148	765	85.00	213.86	96,237	
Cash expenses:							
Calf purchase	cwt	150	450	95.00	142.50	64,125	
Feed							
Hay	ton	148.5		90.00	29.70	13,365	
Rolled barley	ton	67.5		100.00	15.00	6,750	
Feeding costs	$/hd/day	150		0.06	3.60	1,620	
Vet & medicine	head	150		7.50	2.50	1,125	
Marketing	head	148		5.00	1.64	740	
Yardage	$/hd/day	150		0.10	7.20	3,240	
Trucking	head	150		3.00	1.00	450	
Interest @ 9%	dollars	74,183			7.32	3,292	
Miscellaneous	Head	150		5.00	1.67	750	
Total Cash Expenses					212.13	95,457	
Net return					1.73	780	

Calves Purchase Price	Selling Price (needed to breakeven)
dollars per cwt	
75	71.46
80	74.58
85	77.69
90	80.80
95	83.92
100	87.03
105	90.14

Assumptions:
- Days on feed 180
- Gain per day 1.75
- Calves purchased in October and sold in April
- Interest cost figured on cost of calf plus one half the feed cost for period of feeding
- Percent death loss 1.50%
- Average pounds of feed per head per day
  - Hay 11
  - Barley 5

Budget prepared by E. Bruce Godfrey and Dale Zobell

Dairy Bull Budget

Estimated Costs & Returns of having a dairy bull for natural service, Utah, 1997

Item	Unit	Weight	Price	Value	Your Dairy
				Dollars	
Receipts:					
Bull	lbs	1,863	0.45	838.35	
Costs:		number	$/unit	Cost	
Young bull	each	1	800.00	800.00	
Feed					
Alfalfa hay	tons	6.9	90.00	618.75	
Silage	tons	2.2	25.00	55.00	
Grain/concentrates	tons	2.8	200.00	550.00	
Other direct costs					
Labor (100 cows)	hours	25	10.00	250.00	
Bedding	head	1	20.00	20.00	
Maintenance/repairs	head	1	50.00	50.00	
Vet/hoof trim/medicine	head	1	35.00	35.00	
Miscellaneous	head	1	35.00	35.00	
Interest on bull @ 10.00%	dollars	800		120.55	
Total Cost				2,534.30	
Net Cost (sales value less total cost)				(1,695.95)	

Number of cows		Cost/cow	
Bred	Settled	Bred	Settled
100	75	($16.96)	($21.78)
133	100	($13.35)	($16.96)
167	125	($11.18)	($14.07)
200	150	($9.73)	($12.14)
233	175	($8.70)	($10.76)
267	200	($7.92)	($9.73)

Assumptions:

Number of days bull kept (days)	550
Weight of young bull (lbs)	900
Weight gain per day (lbs)	1.75
Hours of labor per cow settled (hours)	0.25

Feed	average lbs/day	total tons
Hay	25	6.9
Grain	8	2.2
Silage	10	2.8

No cost of personal risks are included. This budget only allows one to determine the cost of natural service. It does not include any estimate of the genetic potential of this bull (positive or negative).

Budget prepared by E. Bruce Godfrey, Clark Israelsen, and Allen Young

Per Capita Consumption: Average annual per capita consumption, United States, selected periods 1/

Item	1970-74	1975-79	1980-84	1985-89	1990-94	1995	1996
				Pounds			
Meat, poultry, and fish 2/ 3/	176.5	177.8	179.1	185.4	188.2	193.0	191.9
Red meats 2/ 4/ 5/	130.2	128.6	123.8	120.0	113.0	115.1	112.8
Beef	79.1	82.8	73.1	70.5	63.0	64.4	65.0
Veal	1.7	2.3	1.4	1.3	0.8	0.8	1.0
Pork	47.6	42.4	48.3	47.1	48.3	49.0	46.0
Lamb and mutton	1.9	1.1	1.1	1.0	1.0	0.9	0.8
Poultry 2/ 5/	34.1	36.3	42.3	50.0	60.3	62.9	64.3
Chicken	27.4	29.4	33.9	38.7	46.2	48.8	49.8
Turkey	6.7	6.9	8.4	11.3	14.0	14.1	14.6
Fish and shellfish 2/ 6/	12.1	12.8	13.0	15.4	14.9	14.9	14.7
Fresh and frozen	7.0	7.8	8.1	10.0	9.9	9.9	9.9
Canned	4.7	4.5	4.5	5.1	4.7	4.7	4.5
Cured	0.4	0.4	0.3	0.3	0.3	0.3	0.3
Eggs 5/	38.3	34.9	33.9	32.1	30.3	30.2	30.5
All dairy products, including butter 7/	554.2	542.3	558.6	586.5	572.0	584.4	575.8
Fluid milk and cream	270.7	256.6	239.3	238.0	229.8	223.3	223.6
Fluid milk products	265.5	251.2	233.2	230.5	221.9	214.9	214.9
Beverage milks	264.3	249.0	230.4	226.3	217.6	209.8	210.1
Plain	249.8	233.8	216.8	212.3	204.8	197.0	197.0
Whole	198.6	161.6	131.7	107.6	81.4	72.6	72.1
2 percent fat	34.2	46.8	59.0	73.6	77.3	70.5	69.1
1 percent fat	4.2	13.8	15.1	15.8	20.7	22.0	22.1
Skim	12.8	11.6	11.1	15.3	25.4	31.9	33.7
Flavored	9.3	10.7	9.4	9.8	9.6	10.0	10.4
Whole	6.6	6.3	3.7	3.4	2.7	2.7	2.7
Lowfat and skim	2.7	4.4	5.7	6.4	6.9	7.3	7.7
Buttermilk	5.2	4.5	4.2	4.1	3.2	2.8	2.7
Yogurt	1.2	2.3	2.9	4.2	4.3	5.1	4.8
Fluid cream products	5.2	5.4	6.0	7.5	7.9	8.4	8.7
Cheese 2/ 8/	12.9	16.0	19.5	23.5	25.7	27.3	27.7
American 9/	7.7	9.1	10.9	11.8	11.3	11.8	12.0
Cheddar	6.0	6.6	8.3	9.8	9.1	9.1	9.2
Italian	2.5	3.8	5.0	7.5	9.7	10.4	10.8
Mozzarella	1.6	2.5	3.4	5.6	7.5	8.1	8.5
Other 10/	2.6	3.1	3.6	4.1	4.8	5.0	5.0
Cream and Neufchatel	0.6	0.8	1.1	1.4	2.0	2.1	2.2
Frozen dairy products 11/	28.1	27.5	26.7	28.1	29.1	29.4	28.7
Ice cream	17.6	17.8	17.7	17.7	16.1	15.7	15.9
Ice milk	7.6	7.5	6.9	7.6	7.3	7.5	7.6
Sherbet	1.6	1.4	1.3	1.3	1.2	1.3	1.3
Frozen yogurt	NA	NA	NA	NA	3.3	3.5	2.7
Condensed and evaporated milk 2/	10.7	8.1	7.1	7.8	8.2	6.9	6.4
Skim milk	4.5	3.6	3.3	4.3	5.1	4.5	4.1
Canned whole milk	5.1	3.3	2.7	2.2	2.0	1.5	1.5
Bulk whole milk	1.2	1.2	1.2	1.4	1.0	0.8	0.8
Nonfat dry milk	4.9	3.3	2.4	2.4	2.8	3.5	3.8
Fats and oils, fat content 2/ 12/	52.7	54.5	58.9	63.3	66.9	66.9	65.8
Vegetable fat	39.6	43.7	46.9	51.7	56.5	55.5	54.7
Animal fat	13.1	10.8	12.0	11.6	10.4	11.3	11.1
Fats and oils, product weight 2/	55.9	57.5	62.0	66.3	69.9	69.6	68.6
Butter	5.0	4.4	4.6	4.6	4.5	4.5	4.3
Margarine	11.0	11.4	10.8	10.6	10.7	9.2	9.2
Lard (direct use) 13/	3.8	2.7	2.4	1.8	1.9	2.2	2.3
Edible tallow (direct use) 13/	NA	NA	1.4	1.1	1.8	2.7	3.0
Shortening	17.2	17.6	19.0	21.9	23.3	22.5	22.3
Salad and cooking oils	16.7	19.5	22.2	24.9	26.3	26.9	26.1
Other edible fats and oils 14/	2.2	1.9	1.6	1.4	1.4	1.6	1.4

See footnotes at end of table.

Per Capita Consumption: Average annual per capita consumption, United States, selected periods 7/ (continued)

Item	1970-74	1975-79	1980-84	1985-89	1990-94	1995	1996
				Pounds			
Fresh fruit 2/	93.3	96.9	102.9	113.1	115.2	118.9	123.0
Citrus	27.0	25.7	23.9	22.9	22.4	23.3	24.0
Noncitrus 2/	66.4	71.1	79.0	90.2	92.8	95.6	99.0
Apples	15.6	16.9	17.3	18.6	18.4	18.2	18.6
Melons	18.2	17.3	18.7	22.4	22.6	24.5	27.5
Other noncitrus	32.5	36.9	43.0	49.2	51.9	52.9	52.9
Frozen fruit	3.3	2.9	2.8	3.4	3.4	4.2	3.9
Dried fruit	2.4	2.4	2.6	3.1	3.0	2.8	2.8
Canned fruit	22.4	21.5	18.9	18.4	18.3	15.0	16.4
Selected fruit juices 15/	50.9	58.6	64.8	68.7	68.3	71.7	75.6
Total vegetables (farm weight)	335.5	340.1	339.0	364.5	395.5	404.6	412.4
Fresh vegetables	148.1	145.7	148.6	162.9	169.7	176.3	178.7
Potatoes	55.5	49.5	48.4	48.5	47.9	50.7	48.8
Other	92.6	96.2	100.2	114.3	121.9	125.6	129.9
Processed vegetables	187.4	194.4	190.4	201.6	225.8	228.3	233.7
Vegetables for canning	102.1	100.0	98.8	99.1	111.1	110.4	109.4
Tomatoes 16/	63.0	62.7	62.5	64.5	75.3	75.6	74.2
Other	39.1	37.3	36.3	34.6	35.8	34.8	35.2
Vegetables for freezing	47.3	56.9	56.5	65.6	74.6	78.2	83.3
Potatoes	31.7	40.4	39.7	45.9	53.3	55.3	59.8
Other	15.6	16.4	16.9	19.6	21.3	22.9	23.5
Dehydrated vegetables and chips 17/	30.8	30.8	28.8	30.1	32.2	31.3	33.0
Pulses 18/	7.2	6.7	6.2	6.9	7.9	8.5	8.0
Tree nuts (shelled basis)	1.8	1.8	2.1	2.3	2.3	1.9	2.1
Peanuts (kernel basis)	5.7	5.8	5.7	6.6	6.1	5.7	5.7
Flour and cereal products 2/	135.1	141.2	147.0	168.0	187.4	192.5	198.5
Wheat flour	111.0	116.1	117.3	128.3	139.9	141.8	148.8
Rye flour	1.2	0.8	0.7	0.6	0.6	0.6	0.6
Rice (milled basis)	7.2	7.4	10.1	12.8	17.5	20.1	18.9
Corn products 19/	10.2	11.8	14.1	20.4	22.2	22.7	22.9
Oat products 20/	4.7	4.1	3.8	5.0	6.5	6.5	6.6
Barley products 21/	0.9	1.0	1.0	0.9	0.7	0.7	0.7
Coffee (gallons) 22/	33.1	29.0	26.4	26.7	24.8	20.5	NA
Tea (gallons) 22/	7.2	7.4	7.1	7.0	7.8	8.0	NA
Cocoa (chocolate liquor equivalent) 23/	3.2	2.7	3.0	3.8	4.3	3.6	NA
Total sweeteners 2/ 24/	129.0	130.4	133.3	149.9	NA	NA	NA
Caloric sweeteners 2/ 24/	123.7	123.8	122.4	130.6	141.6	149.8	152.0
Refined sugar	100.5	91.5	74.7	62.0	64.4	65.5	66.2
Corn sweeteners	21.7	30.9	46.4	67.3	75.8	83.0	84.5
Low-calorie sweeteners 25/	5.4	6.6	10.8	19.2	NA	NA	NA

NA = Not available.

1/ Retail-weight equivalent unless otherwise indicated. 2/ Total may not add due to rounding. 3/ Boneless, trimmed equivalent. 4/ Excludes game meat and edible offals. 5/ Excludes shipments to U.S. territories. 6/ Excludes game fish. 7/ Milk equivalent, milkfat basis. Items shown separately are product-weight basis. 8/ Natural equivalent of cheese and cheese products. Excludes full-skim American, cottage, pot, and baker's cheese. 9/ Cheddar, Colby, washed curd, stirred curd, Monterey, and Jack. 10/ Swiss, brick, Muenster, blue, and other miscellaneous cheeses. 11/ Includes mellorine and nonstandardized frozen dairy products. 12/ Fat content of butter and margarine is 80 percent of product weight. 13/ Direct use excludes use in margarine and shortening. 14/ Specialty fats used mainly in confectionery products and non-dairy creamers. 15/ Single-strength equivalent. 16/ Includes use in such tomato products as ketchup, tomato sauce, and canned tomatoes. 17/ Potatoes and dehydrated onions. 18/ Dry peas, lentils, and dry edible beans. 19/ Corn flour, meal, hominy, grits, and cornstarch; excludes corn sweeteners. 20/ Oatmeal, oat cereal, oat flour, and oat bran. 21/ Barley flour, pearl barley, and malt and malt extract. 22/ Fluid equivalent. 23/ Chocolate liquor is what remains after cocoa beans have been toasted and dehulled; it is sometimes called ground or bitter chocolate. 24/ Dry weight. Includes honey and edible syrups. 25/ Sugar-sweetness equivalent.

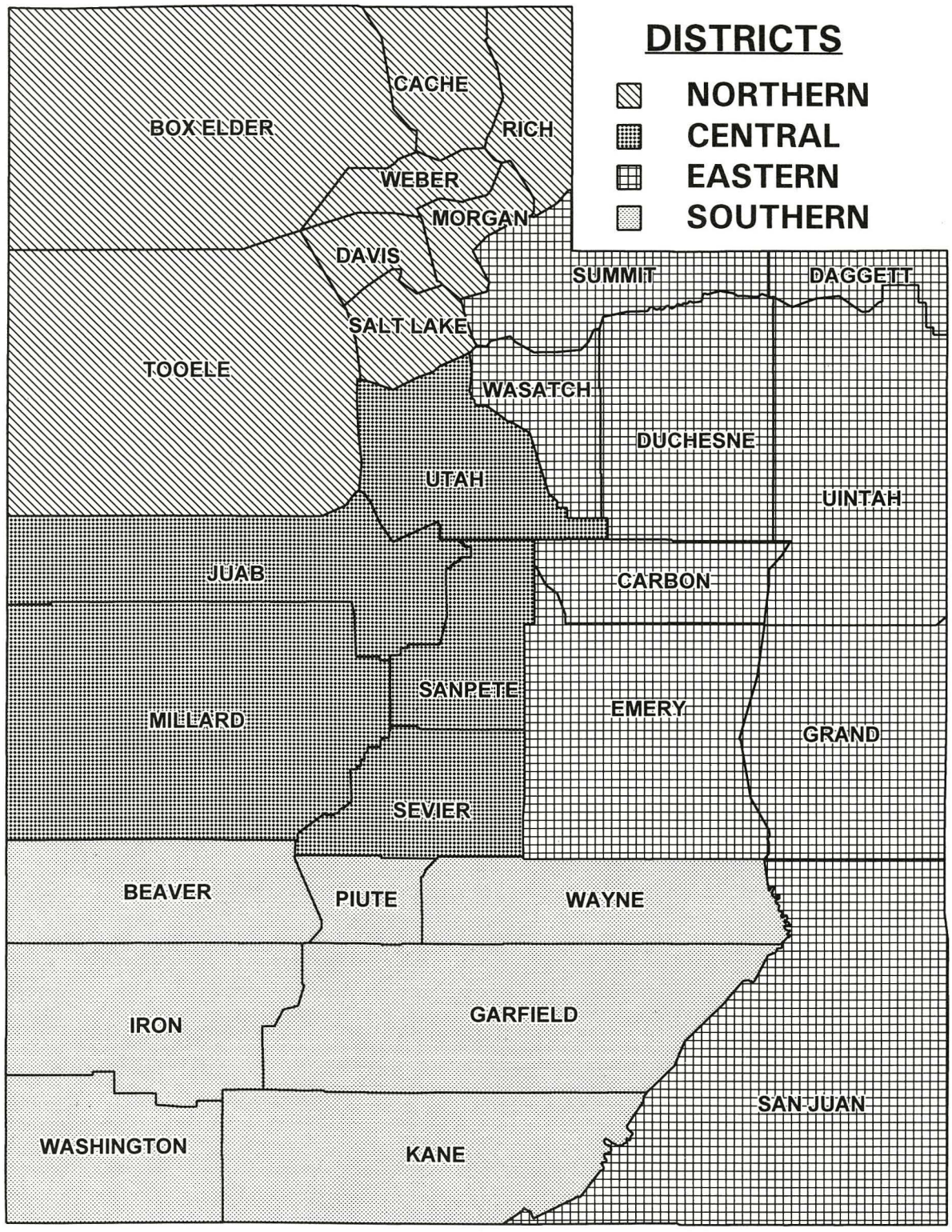
Source: USDA/Economic Research Service.

Farm Real Estate: Average value per acre, by Region and State, January 1, 1980, 85, 90, 95-98 1/ 2/

State	1980	1985	1990	1995	1996	1997	1998
				Dollars			
Northeast	***1,269***	***1,346***	***1,848***	***2,414***	***2,484***	***2,599***	***2,676***
Connecticut	2,387	3,005	5,033	6,567	6,810	7,500	7,800
Delaware	1,798	1,596	2,214	2,689	2,907	3,170	3,350
Maine	594	774	1,073	1,245	1,291	1,300	1,320
Maryland	2,238	2,197	2,563	3,707	3,826	4,000	4,120
Massachusetts	1,608	2,377	4,227	5,398	5,597	6,200	6,450
New Hampshire	1,004	1,439	2,269	2,486	2,578	2,600	2,700
New Jersey	2,947	2,951	5,494	8,052	8,172	8,290	8,370
New York	720	820	1,014	1,380	1,333	1,390	1,390
Pennsylvania	1,464	1,427	1,929	2,339	2,505	2,630	2,760
Rhode Island	2,523	2,990	5,564	6,947	7,204	7,900	8,200
Vermont	721	947	1,262	1,479	1,534	1,550	1,550
Lake States	***1,065***	***952***	***843***	***1,048***	***1,126***	***1,205***	***1,288***
Michigan	1,111	1,108	1,005	1,329	1,470	1,600	1,720
Minnesota	1,086	898	810	936	976	1,040	1,100
Wisconsin	1,004	944	801	1,065	1,175	1,250	1,350
Corn Belt	***1,643***	***1,108***	***1,111***	***1,448***	***1,578***	****1,720***	***1,869***
Illinois	2,041	1,381	1,405	1,863	2,064	2,210	2,380
Indiana	1,863	1,344	1,254	1,654	1,801	1,970	2,170
Iowa	1,840	1,091	1,090	1,349	1,442	*1,650	1,800
Missouri	902	689	701	880	948	1,010	1,090
Ohio	1,730	1,215	1,273	1,800	1,989	2,110	2,300
Northern Plains	***485***	***412***	***401***	***458***	***476***	***504***	***530***
Kansas	587	488	450	535	553	575	590
Nebraska	635	485	524	596	632	680	735
North Dakota	405	373	321	373	383	410	415
South Dakota	292	289	291	302	310	325	350
Appalachian	***1,014***	***1,035***	***1,178***	***1,436***	***1,597***	***1,685***	***1,769***
Kentucky	976	955	978	1,250	1,377	1,450	1,550
North Carolina	1,219	1,242	1,355	1,749	1,970	2,050	2,130
Tennessee	976	944	1,067	1,336	1,526	1,650	1,740
Virginia	1,028	1,112	1,665	1,771	1,925	2,030	2,100
West Virginia	669	607	664	910	965	1,000	1,050
Southeast	***1,005***	***1,068***	***1,300***	***1,533***	***1,631***	***1,683***	***1,740***
Alabama	780	797	890	1,262	1,387	1,480	1,570
Florida	1,381	1,599	2,070	2,219	2,306	2,300	2,320
Georgia	896	886	1,079	1,256	1,358	1,430	1,500
South Carolina	900	898	1,011	1,337	1,363	1,400	1,440
Delta States	***966***	***1,012***	***806***	***972***	***1,009***	***1,041***	***1,087***
Arkansas	918	907	796	983	989	1,010	1,050
Louisiana	1,256	1,407	915	1,082	1,176	1,230	1,280
Mississippi	819	855	736	886	917	950	1,000
Southern Plains	***472***	***676***	***504***	***550***	***565***	***594***	***640***
Oklahoma	614	597	491	547	547	570	600
Texas	436	694	507	550	570	600	650
Mountain	***284***	***300***	***265***	***346***	***379***	***403***	***422***
Arizona	267	295	267	347	399	420	440
Colorado	387	437	374	520	558	590	620
Idaho	698	739	658	836	905	960	1,020
Montana	235	243	222	277	289	305	320
Nevada	248	244	207	289	332	350	365
New Mexico	185	185	185	225	258	280	290
Utah	530	513	398	606	697	750	780
Wyoming	161	181	153	192	206	220	230
Pacific	***1,037***	***1,293***	***1,259***	***1,549***	***1,676***	***1,774***	***1,847***
California	1,424	1,841	1,884	2,215	2,404	2,510	2,620
Oregon	587	615	573	844	928	1,000	1,030
Washington	736	943	821	1,065	1,117	1,230	1,280
48 States	***737***	***713***	***683***	***832***	***890***	****945***	***1,000***

* Revised. 1/ Value of farmland and buildings. 2/ Estimates for 1996 and prior years previously published by the Economic Research Service, USDA.

UTAH COUNTIES AND DISTRICTS



UNITED STATES DEPARTMENT OF AGRICULTURE
UTAH AGRICULTURAL STATISTICS SERVICE
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