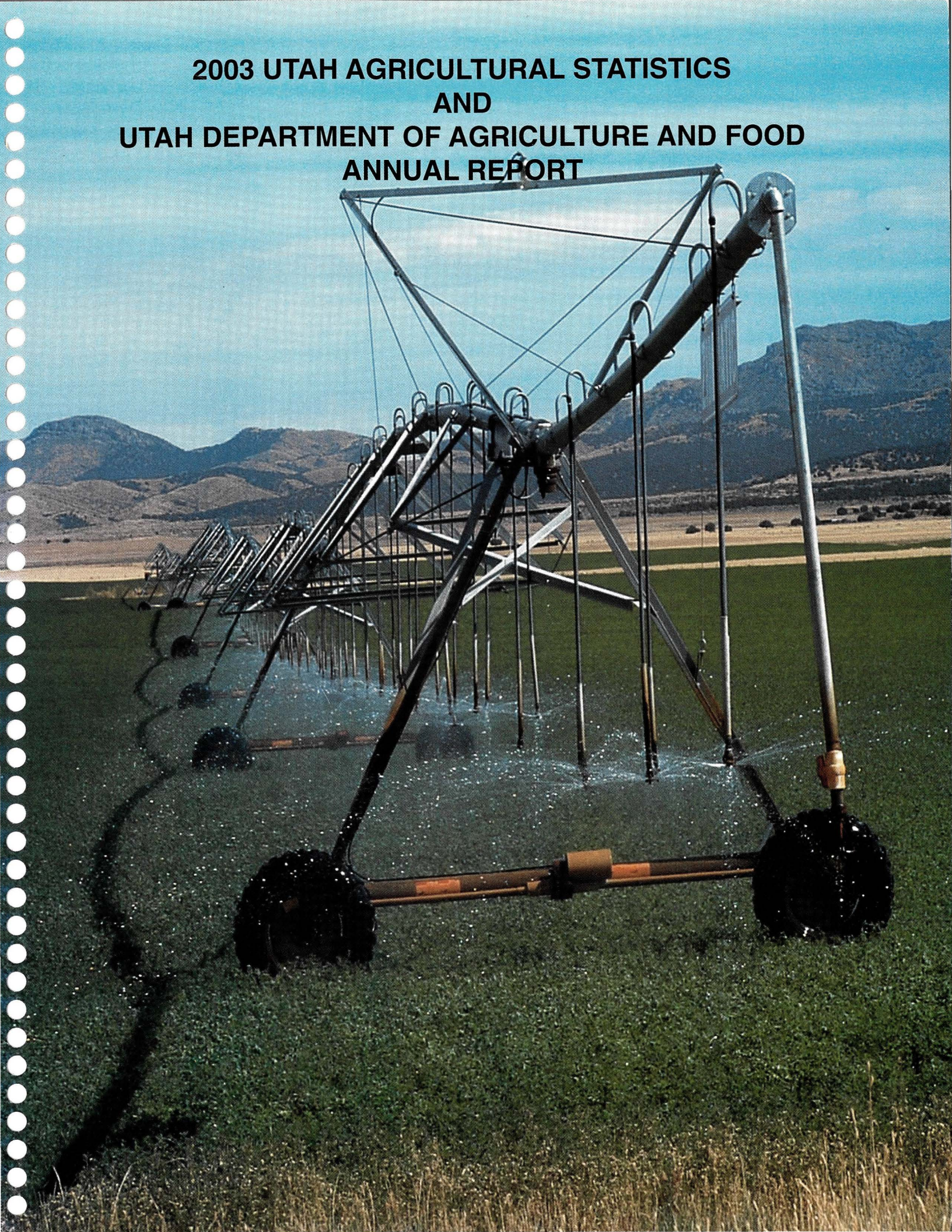
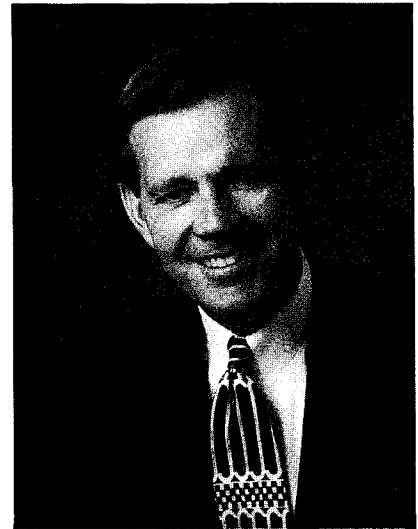


**2003 UTAH AGRICULTURAL STATISTICS  
AND  
UTAH DEPARTMENT OF AGRICULTURE AND FOOD  
ANNUAL REPORT**





Michael O. Leavitt  
Governor,  
State of Utah



Two hundred and sixteen years ago, Thomas Jefferson eloquently observed that agriculture "...is our wisest pursuit, because it will in the end contribute most to real wealth, good morals and happiness. In Utah's agricultural industry, those ideals continue to hold true today.

Utah agriculture contributes more than we realize to our economy, quality of life and heritage. Last year alone, agriculture generated billions of dollars of economic activity in our state. Agricultural lands provide beautiful open spaces that clean our air and provide important wildlife habitat. And Utahns enjoy the milk, ice cream, cheese, meat, produce, clothing, and other goods made from the raw products our local agricultural industry provides.

Agriculture also forms the foundation of our state's identity. Part of Utah's positive reputation comes from our industrious and neighborly people who carry with them the values learned from our agricultural heritage. I fondly remember the many lessons I learned working our family farm as a young boy. Such work built character, responsibility and a respect for the land.

Utah faces an exciting and dynamic future, and so does our agricultural industry. Thanks to the 2002 Olympic Winter Games, people around the world have an increased interest in Utah. Agriculture Commissioner Cary Peterson is building upon that interest, representing Utah agriculture in our foreign trade missions. Marketing outside our borders has proven to be a wise pursuit. Last year our agriculture exports increased to \$322 million dollars.

I look forward to a future where agriculture continues to play an important role in Utah, contributing to our economy and quality of life, and I offer thanks to Utah's agricultural industry.

Sincerely,

A handwritten signature in black ink that reads "Michael O. Leavitt". The signature is written in a cursive, flowing style.

Michael O. Leavitt, Governor  
State of Utah

# Introduction

The Utah Agricultural Statistics Service (the Utah office of the National Agricultural Statistics Service [NASS] ) and the Utah Department of Agriculture and Food are proud to provide the 33rd edition of this publication. Funding cuts within the state of Utah have required us to economize on this year's publication. There will not be as many copies of this publication available as in the past. However copies of the publication are also available on both of our Internet sites and also on a CD. Information in 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.

Estimates presented in the publication are current for 2002 production, and January 1, 2003 inventories. Data users that need 2003 production information or additional historic data should contact the Utah Agricultural Statistics Service, at 524-5003 or 1-800-747-8522.

State and U. S. statistics are available on the NASS Web page at <http://www.usda.gov/nass/>. You can find commodity estimates by selecting "Publications", "Reports by Commodity", select the desired commodity, and then select the report wanted. Try the "Quick STATS" selection on the home page to access historic data. You will find it quite an interesting way to gather data. The data found can be downloaded as a zipped ".CSV" file and imported into a spreadsheet for your processing needs.

Cooperation from farmers, ranchers, and agribusinesses responding to various survey questionnaires is essential to quality estimates. We thank them for their help and willingness to provide individual operation data. We pledge to keep their individual operation data confidential.

Our NASDA enumerators provide an important roll in gathering data. I enjoy talking to farmers and ranchers and reviewing their experiences with those enumerators.

Prior year estimates are subject to revision and may have been revised in this publication. Data users should use this publication for previous years data and not go back to earlier publications for earlier years data.

The following agricultural Web page sources may interest you.

Organization	Web Page Address
U. S. Department of Agriculture (Includes links to all USDA Agencies)	<a href="http://www.usda.gov/">http://www.usda.gov/</a>
U. S Department of Agriculture ( <b>Farm Bill 2002 information</b> )	<a href="http://www.usda.gov/farmbill/index.html">http://www.usda.gov/farmbill/index.html</a>
USDA - National Agricultural Statistics Service (Plus Census of Agriculture)	<a href="http://www.usda.gov/nass/">http://www.usda.gov/nass/</a>
USDA - Utah Agricultural Statistics Service	<a href="http://www.nass.usda.gov/ut/">http://www.nass.usda.gov/ut/</a>
USDA - Utah Farm Service Agency, FSA	<a href="http://www.fsa.usda.gov/ut/">http://www.fsa.usda.gov/ut/</a>
USDA - Market News	<a href="http://www.ams.usda.gov/">http://www.ams.usda.gov/</a>
USDA - Utah Natural Resources Conservation Service, NRCS	<a href="http://www.ut.nrcs.usda.gov">http://www.ut.nrcs.usda.gov</a>
USDA - Economic Research Service	<a href="http://www.ers.usda.gov">http://www.ers.usda.gov</a>
Fedstats (Statistics from Federal Agencies)	<a href="http://www.fedstats.gov/">http://www.fedstats.gov/</a>
The Federal Register	<a href="http://www.nara.gov/fedreg/index.html">http://www.nara.gov/fedreg/index.html</a>
Agriculture Sources	<a href="http://www.agsource.com/">http://www.agsource.com/</a>
Utah Department of Agriculture and Food	<a href="http://www.ag.utah.gov/">http://www.ag.utah.gov/</a>
Utah Department of Agriculture and Food - Market Reports	<a href="http://ag.utah.gov./markets.html">http://ag.utah.gov./markets.html</a>
National Association of State Departments of Agriculture (NASDA)	<a href="http://www.nasda-hq.org">http://www.nasda-hq.org</a>
Salt Lake City National Weather Service	<a href="http://nimbo.wrh.noaa.gov/saltlake/">http://nimbo.wrh.noaa.gov/saltlake/</a>
Western Regional Climate Center	<a href="http://wrcc.sage.dri.edu/">http://wrcc.sage.dri.edu/</a>
Utah Climate Center	<a href="http://climate.usu.edu/">http://climate.usu.edu/</a>
USU Extension Service	<a href="http://extension.usu.edu/">http://extension.usu.edu/</a>
Utah Agriculture in the Classroom	<a href="http://extension.usu.edu/aic/">http://extension.usu.edu/aic/</a>
National Farmers Union	<a href="http://www.nfu.org/">http://www.nfu.org/</a>
Utah Farm Bureau	<a href="http://www.fb.com/utfb/">http://www.fb.com/utfb/</a>
National Cattlemen's Beef Association	<a href="http://www.beef.org/">http://www.beef.org/</a>
American Sheep Industry Association, Inc	<a href="http://www.sheepusa.org">http://www.sheepusa.org</a>
National Dairy Council	<a href="http://www.nationaldairycouncil.org">http://www.nationaldairycouncil.org</a>
National Dairy Database	<a href="http://www.inform.umd.edu/edres/topic/agrenv/ndd">http://www.inform.umd.edu/edres/topic/agrenv/ndd</a>

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Richard A. Kestle, State Statistician  
Utah Agricultural Statistics Service

# **UTAH AGRICULTURAL STATISTICS SERVICE AND UTAH DEPARTMENT OF AGRICULTURE AND FOOD 2003 ANNUAL REPORT**

*prepared by*

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*We would like to thank Mark Quilter for providing the cover photo.*

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**UTAH DEPARTMENT OF AGRICULTURE AND FOOD  
2003 ANNUAL REPORT**



# Utah Department of Agriculture and Food

## Administration

Cary G. Peterson  
Commissioner

Kyle R. Stephens  
Deputy Commissioner

Renee Matsuura  
Director of Administrative Services

Randy Parker  
Director of Agricultural Marketing and Conservation

Dr. Michael R. Marshall  
Director of Animal Industry/State Veterinarian

Dr. David H. Clark  
Director of Laboratory Services/State Chemist

G. Richard Wilson  
Director of Plant Industry

Dr. Chris Crnich  
Director of Regulatory Services

Larry Lewis  
Public Information Officer

Eileen Frisbey  
Administrative Assistant

Kathleen Mathews  
Administrative Secretary

## Agricultural Advisory Board

Arthur Douglas ..... Chairman  
Utah Farmers Union

Bob Bown ..... Vice Chairman  
Utah Dairymens Association

Clark Willis ..... Utah Wool Growers Association

Tim Munns ..... Utah Cattlemens Association

George Dyches ..... Food Processing Industry

James Selander ..... Food Supplement Manufacturers

Merl Thurgood ..... Utah Horse Industry

Larry Johnson..... Utah Assn. of Conservation Districts

Grant Tingey..... Utah Livestock Marketing Association

Carma Wadley ..... Consumers' Representative

Dr. James Eaton..... Utah Veterinary Medical Association

Leland Hogan ..... Utah Farm Bureau

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Internet email: [larrylewis@utah.gov](mailto:larrylewis@utah.gov)

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Commissioner ..... 538-7101  
Deputy Commissioner ..... 538-7102  
Compliance Specialist ..... 538-7141  
Public Information Officer ..... 538-7104  
Administrative Assistant ..... 538-7105

### Administrative Services

Director ..... 538-7110  
Budget and Accounting ..... 538-7032  
Data Processing Services ..... 538-7113  
GIS ..... 538-9904  
Personnel and Payroll ..... 538-7112

### Agricultural Marketing and Conservation

Director ..... 538-7108  
Ag Resource Development Loans ..... 538-7176  
Environmental Quality ..... 538-7175  
Livestock & Market News ..... 538-7109  
Environmental Quality Information Specialist 538-7098

Soil Conservation ..... 538-7171

Agricultural Statistics (USDA) ..... 524-5003

Animal Damage Control ..... 975-3315

### Animal Industry

Director ..... 538-7160  
Animal Health ..... 538-7162  
Animal Identification (Brands) ..... 538-7166  
Aquaculture ..... 538-7029  
Elk Farming ..... 538-7137  
Meat Inspection ..... 538-7117  
Serology Laboratory ..... 538-7165

### Chemistry Laboratory

Director ..... 538-7128  
Bacteriology Laboratory ..... 538-7129  
Feed & Fertilizer Laboratory ..... 538-7134  
Meat Laboratory ..... 538-7132  
Pesticide Residue Laboratory ..... 538-7135

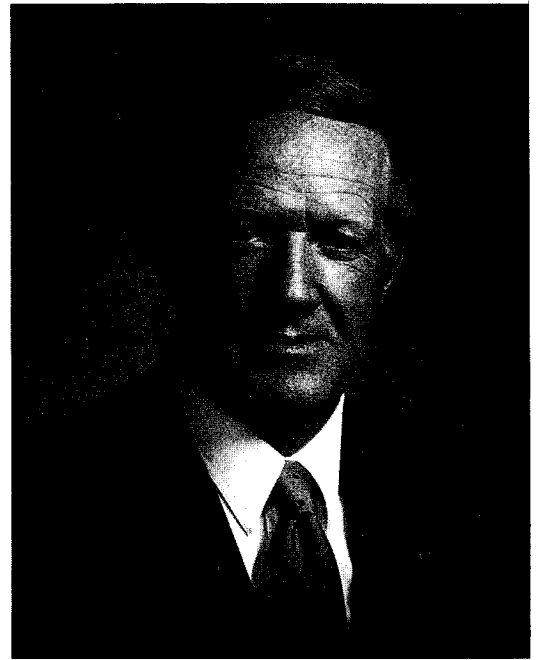
### Plant Industry

Director ..... 538-7180  
Entomology ..... 538-7184  
Fresh Fruit & Vegetable Inspection ..... 538-7183  
Seed & Feed Inspection ..... 538-7187  
Grain Grading Lab (Ogden UT) ..... 392-2292  
Insect Infestation Emergency Control ..... 538-7180  
Noxious Weeds ..... 538-7183  
Pesticides/Fertilizers ..... 538-7188  
Seed Laboratory ..... 538-7182

### Regulatory Services

Director ..... 538-7150  
Bedding, Quilted Clothing, & Upholstered Furn. 538-7151  
Dairy Compliance ..... 538-7145  
Egg & Poultry Compliance ..... 538-7144  
Food Compliance ..... 538-7149  
Label Evaluation ..... 538-7151  
Meat Compliance ..... 538-7144  
Metrology (measurement) Laboratory ..... 538-7153  
Motor Fuels Testing Laboratory ..... 538-7154  
Weights & Measures ..... 538-7158

Commissioner of Agriculture  
and Food  
Cary G. Peterson



Utah's farmers and ranchers have again demonstrated an inspiring level of determination, courage and resilience during these challenging times. For the 5th time in six years drought conditions in Utah have warranted state and federal disaster declarations. Yet through it all, our agricultural producers have found ways to adapt.

The drought along with insect infestations and other economic pressures have resulted in a .9 percent decline in cash receipts paid to our farmers and ranchers in 2002.\* Compare that to the 1.4 percent dip in Utah copper prices, a 44.3 percent dip in Utah natural gas prices and a .9 percent decline in Utah oil prices.\*\*

Our producers continue to conserve their water resources every way they can. Our State Fair exhibit this year emphasized the many innovations in Utah irrigation practices through the decades. Using these modern techniques Utah farmers and ranchers save millions of gallons of water that would otherwise be lost to evaporation, runoff or excessive seepage deep into the ground.

We're not only working to increase the quantity of our water, we are improving its quality as well. Utah livestock producers, the Utah Department of Agriculture and Food along with the U.S. Environmental Protection Agency are working together to improve the quality of our stream water. The program offers ranchers incentives rather than regulatory penalties, and its success makes the program a national model.

Protecting both the quality and quantity of our water is vital to helping Utah's 15,000 farmers and ranchers continue to produce the most abundant, the safest and most affordable food supply ever, despite the challenges posed by drought and the slow economy.

Thank you.

A handwritten signature in black ink that reads "Cary G. Peterson". The signature is written in a cursive, flowing style.

Cary G. Peterson, Utah  
Commissioner of Agriculture and Food

(\* USDA National Agricultural Statistic Service, \*\*Utah Governor's Office of Planning and Budget Summer 2003 Data Guide)

# Mission Statement

The mission of the Utah Department of Agriculture and Food is to "Protect and Promote Utah Agriculture and food." It is also believed that a safe food supply is the basis for health and prosperity. Food safety, public health and consumer protection is a critical and essential function of state government. In order to accomplish this mission, with increased population and industry growth, we are identifying ways and means to fund the regulatory functions of the department. In addition, we continue to educate the public about the importance of agriculture and the value of maintaining a viable agriculture industry.

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:

## Homeland Security

Homeland Security has become a focus of the Department since the September 11, 2001 attack on the United States. The threat of agri-terrorism and the possibility of foreign animal disease being introduced to the state make this a top priority. The Department worked to obtain federal funding for developing a mobile emergency response capability. The Division of Animal Industry has offered training and consultation in bio-security measures to various groups.



(above) The Department's Central Utah Veterinary Diagnostic Laboratory, located in Nephi, Utah, was dedicated in July of 2003. The lab serves as a primary line of defense to detect and prevent the spread of animal diseases, especially diseases that are transmissible from animals to humans.

## 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.

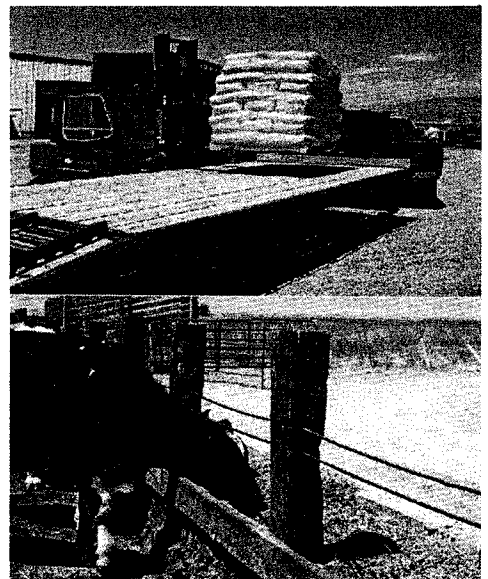
## Conservation

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 in-state processing of Utah agricultural products for a stronger state economy.

(right) First shipment of USDA non-fat dry milk (NDM) is delivered to ranchers in Tremonton, Utah as part of a 10-state drought relief program.  
(right) Dry milk and hay mixture is fed to cattle at Sorensen Ranch in Howell Valley, Box Elder County.



# Commissioner's Office

The department has made several important program adjustments in 2002 as a result of increased homeland security, the economy and the prolonged drought in Utah. The department has also built upon past successes in areas of clean water, marketing and food safety.

The threat of agri-terrorism and the possible introduction of a foreign animal disease into the United States make these issues top priorities for the department and its various divisions. The Division of Animal Industry was successful in obtaining federal funding to develop a mobile emergency response unit to respond to any animal disease emergency.

The department's Animal Feeding Operation (AFO) clean water program continues to expand in popularity with Utah ranchers. The incentive-based program continues to attract national praise from the U.S. Environmental Protection Agency because of its emphasis on building partnerships with stakeholders rather than regulatory consequences. The program focuses on improving water quality by helping livestock owners better manage livestock waste.

Consumer protection in the area of weights and measures will benefit from an additional two compliance officers hired in 2003. The additional inspectors will help a team of 10 others to monitor the accuracy of the tens of thousands of retail checkout scanners, small scales and gasoline pumps.

Utah's lush tree stands remain virtually untouched by the potentially devastating effects of the Gypsy Moth. The division of Plant Industry's partnership with the U.S. Forest Services is held as a model for other states.

Laboratory analysis of pesticides, salmonella, E. coli and other contaminants of our food supply has been greatly streamlined by the introduction of computer based testing in the department's chemistry laboratory. Hazardous chemical-based testing is replaced with faster and more economical computer testing.

E-commerce and the Internet are helping consumers conduct business with the department swifter and more convenient. Consumers can now renew their various licenses with the department via the Internet. The breakthrough won the department the "Outstanding On-line Application" by Governor Leavitt.

## The Drought

Few single events have impacted Utah agriculture as has the drought of 1998 - 2003. Many agricultural industries have been impacted by the exceptionally low water totals recorded during the past five years.

In response to the drought, the U.S. Department of Agriculture called on the Utah Department of Agriculture and Food to distributing 16 million pounds of surplus non-fat dry milk as a feed supplement to qualified Utah livestock owners. The NDM program was offered to 10 Western states as drought relief by the

USDA. In Utah, more than 1300 owners of foundation cattle, buffalo, sheep and goats participated in the program.

## Agriculture in the Classroom Program

United States agriculture provides a safe supply of food that frees the rest of us to concentrate on other activities such as medical research, space travel, computer technology, art, music, literature, philosophy, and recreation. Agriculture allows us to live differently in the US, and our youth need to know why. This is the mission of Utah Agriculture in the Classroom (AITC).

Utah AITC is part of a national effort designed to help students develop an awareness and understanding of our food and fiber system, and how agriculture affects our daily lives and our environment. Agriculture in the Classroom provides training and resources to classroom teachers to use agriculture as a vehicle to teach across existing, state required curriculum.

Utah students and teachers were recently part of an Oklahoma State University study to determine the agricultural knowledge of kindergarten through sixth grade students whose teachers had received AITC training compared with students whose teachers had not received AITC training. Results showed that Utah AITC trained teachers make a positive, significant difference in student understanding of agriculture. The study revealed that students taught by AITC trained teachers were most knowledgeable about agriculture in the following areas: Grades K-1 (Food, Nutrition, and Health); Grades 2-3 (Understanding Food and Fiber Systems); Grades 4-5 (Science, Technology, and Environment); and Grade 6 (History, Geography, and Culture). The study also indicated areas needing improvement. Students were least knowledgeable about agriculture in the following areas: Grades K-1 (History, Geography, and Culture) and Grades 2-6 (Food, Nutrition, and Health). Debra Spielmaker, Utah AITC Director says that this study "helps us to develop future AITC teacher training and directs us to areas for material development."

## Public Information Office

The office of Public Information is an important link between the public, industry, employees, and the department. The office publishes various brochures, articles and newsletters as well as creates displays and computer presentations. The office also writes news releases and serves at times as spokesperson for the department.

During the past year, the PIO created public awareness campaigns for many of the department's activities such as homeland security, West Nile Disease, drought assistance programs, Mormon cricket and grasshopper control and national food safety month.



Kyle R. Stephens  
Deputy Commissioner

The Public Information Office also interacts with local schools, offering students lessons on the connection between the farm and our food.

The PIO also coordinates the department's Critical Agricultural Land Conservation Fund which helps protect Utah farm and ranchland.

### 1000-Day Economic Plan

The department has identified numerous ways to work faster, higher and stronger following the 2002 Winter Olympics. The following is a condensed version of the department's 1000-day plan. Strategy #1 - Enhance Utah's life quality and economic viability. A safe food supply is the basis for health and prosperity. The department's mission is to "Protect and Promote Utah Agriculture and food." Food safety, public health and consumer protection is a critical and essential function of state government. In order to accomplish this mission, with increased population and industry growth, we are identifying ways and means to fund the regulatory functions of the department. In addition, we continue to educate the consuming public on the importance of agriculture and the value of maintaining a viable agriculture industry.

Strategy #2 - Invest in people. Utah has a well-educated and well-trained workforce and appropriate compensation is critical to maintain the expertise and knowledge base of highly trained employees.

Strategy #3 - Develop Utah as a center for technology investment, employment and entrepreneurship. The department will look at opportunities to utilize E-government and expand electronic services within department programs and adapt to new technological advancements in order to more effectively accomplish the mission of the department.

### Milestones

The following are "milestone" achievements associated with the 1000-day plan.

Day 341 - January 10, 2003 The Utah Cattle Health Assurance Program (UCHAP) leads to six fold reduction in Trichomoniasis cases in year 2002 and plays a significant role in the department's Farm-to-Table disease intervention program and has qualified Utah to receive more than \$150,000 in federal funding for Johne's Disease control.

Day 351 - January 20, 2003 Participation in FDA Counter-Terrorism Food Emergency Response Network (FERN). It is a network of state and federal laboratories that are committed to analyzing food samples in the event of a biological, chemical, or radiological terrorist attack in this country. Federal partners are FDA, USDA, CDC, and EPA..

Day 394 - March 4, 2003: Wildlife Services trappers locate and remove two wolves near the Utah/Wyoming border following

depredation attacks on Utah sheep. WS trappers added to a multi-state 24/7 call out team because of their skills.

Day 404-- March 14, 2003: Two Utah Companies participated with UDAF at Foodex Food Show in Tokyo, Japan. Participating companies reported projected sales in the coming 12 months of \$1,250,000.

Day 409 - 19, 2003: Chemistry Laboratory reduces cost of groundwater sampling from \$9.50 per sample to \$2.25 per sample.

Day 422 - April 1, 2003: Utah Egg Quality Assurance Program (UEQAP) passes the two-year mark for significantly reduced numbers of Salmonella illness. Prior to 2001, the Department of Health was reporting over 300 cases per year, while in 2002 only 40 cases were reported, an 8-fold decrease that has been sustained over the last 2 years.

Day 450 - April 29, 2003: Information Technology team wins the State's Outstanding On-line Application award for the development of the first on-line license renewal system that contained the ability to also search for current licenses on file.

Day 452 -- May 1, 2003: Animal Feeding Operations assessment team inventoried 3,000th farm and ranch as UDAF works to improve groundwater quality in Utah, and prevent landowners from undergoing expensive permitting process with U.S. EPA.

Day 533 - July 21, 2003: Opening of Central Utah Veterinary Diagnostic Laboratory in Nephi, Utah. The laboratory serves as a primary line of defense to detect and prevent the spread of animal diseases. The laboratory is especially concerned with diseases that are transmissible from animals to man, and will employ technology to promote homeland security and deter bioterrorism.

Day 502 -- June 20, 2003 Utah ARDL Program booked over \$3 million in low interest loans to assist Utah farmers and ranchers address soil and water conservation objectives and leverage federal resources available through NPS 319, EQIP and other programs.

Day 513 - July 1, 2003: UDAF Groundwater Program tested its 1,955th rural water sample from across the state helping citizens determine water quality for culinary and agriculture uses.

Day 513 - July 1, 2003: Concentrated Animal Feeding Operations (CAFO) assessment team has identified 387 Potential CAFO's during statewide inventory and assessment campaign. Potential CAFO's are being provided technical and financial assistance to keep them out of the EPA's permitting process.

Day 544 - August 1, 2003: UDAF's Parallel Salinity Program, assisted Utah farmers and ranchers in improving irrigation systems to conserve water resources and reduce salt loads introduced into the Colorado River. Over 7,800 acres have improved irrigation systems in the Uintah Basin, Price River and San Rafael regions removing 32,800 tons of salt.

# Administrative Services



Renee Matsuura  
Director

The goal of Administrative Services is to provide continues, 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.

## Information Technology Services

The Department was given an award from the Chief Information Office (CIO) by the Governor for providing on-line renewal via the Internet. We were the first agency to take e-checks on-line for license renewals. In order to implement the on-line license renewal new software was developed for the department's licensing program. Because of the hard work put forth by the team members that included information technology section, licensing section and financial section to make the project successful. The on-line access to the public became available November 1, 2002.

The development of the improved licensing program provided savings in printing, man-hours manually cutting and stuffing envelopes. The bar codes printed on the renewal forms which are returned to agency saves in data entry time that includes the name, address, type of license, license fee, customer number and revenue source code will automatically fill in when entering the license fee into the department's cash system. This information also updates the WEB site for licenses issued.

With the addition of the Program Analyst and LAN Coordinator to the information technology services section our customer service level has improved 125%. Software upgrades to Microsoft Office XP have provides our system to run in a more efficient manner. A new LAN Server and GIS Server were installed to improve service to our users and customers.

Installed a digital recorder and cameras to capture images on our upgraded security system. Also, magnetic locks for all fire doors being held open with wedges were installed to meet the Fire Marshall's guidelines.

## Human Resource Management Section

The Human Resource Management section of the Utah Department of Agriculture and Food provides support and information to management and employees in job classification, compensation, recruitment, payroll, leave matters, rules, policies and procedures, state employee benefits. Other programs and

services such as Family Medical Leave Act, Americans with Disabilities Act, Employee Assistance Program, Educational Assistance, mediation, new employee orientation and employee training are also provided by the Human Resource Management Section.

A new recruitment program, Utah Job Match, is in the process of being completed and implemented to improve the hiring process for the State of Utah. The Department's Human Resource staff is involved in creating a new Position Description Analysis in the Utah Job Match program for each position in the Department. Implemented several new policies - Unlawful Harassment, Employee Conduct, Work Place Violence and in the process of a final review on Department Vehicle Use. Also trained all employees in regards to Ethic's and the proper use of state equipment. Employees who received the training signed an acknowledgment statement that they received and understand the training provided.

On March 3, 2003, State Finance implemented the new SAP payroll program. There are many new features to the program, which one will eventually allow each employee to enter their own timesheet into the payroll system.

## Financial Section

Brand Recording Program - a new software was developed to capture the revenue collected by brand inspectors which include brand inspection fee, beef promotion fee, and predator fee (collected at auction markets). The new program provides reports that eliminate creating separate excel reports and increases error checking. The data entry completed in the brand collection system also enters the data into the department's cash system; therefore, reducing a double entry process.

We are in the midst of performing a full physical fixed asset audit in the department. The assets include capital assets above \$5,000 and we also capture fixed assets for information purposes that cost below \$5,000. The audit will also cover outlying areas of the state that have department fixed assets.

The finance section of our division was responsible for auditing the Organic Certification Program. Reviewing records of processors and farms was informing and challenging. There were many questions asked by the auditor that included the requirements to become certified by USDA.

# Wildlife Services

Mike Bodenchuk  
Federal Program Director



The Wildlife Services (WS) program is a cooperative effort between the Utah Department of Agriculture and Food and the US Department of Agriculture-Animal and Plant Health Inspection Service Wildlife Services program. The Federal State Director serves as the division Director within the Department of Agriculture and Food and State employees serve alongside Federal employees in accomplishing the mission of the Department. The cooperative effort is so successful; the program was recognized in 1998 with the Governor's Quality Service Award.

The Utah cooperative program, which includes 17 State and 16 federal employees, has served as a model for wildlife damage management programs nationwide. Personnel from the program often consult with other state and federal programs, lending expertise to developing programs and employees in all aspects of wildlife management.

Funding for the Wildlife Services program comes from several sources, including direct funds from livestock producers, county funding and federal and state appropriations. Due to declining sheep numbers, producer funding has decreased in recent years. However, a holistic approach to wildlife damage management has allowed the program to remain efficient.

Much of the current focus of the program involves protection of livestock from predators, notably coyotes, red fox, black bears and mountain lions. Coyotes cause substantial losses to the sheep industry, killing tens of thousands of adult sheep and lambs annually. Coyotes also kill calves and occasionally adult cattle during calving. Cougars and black bears kill sheep, lambs and a few calves, primarily in the summer months when livestock are grazed at higher elevations. Red fox, a non-native predator, kill lambs during the spring and are a serious predator to the poultry industry.

In addition to killing livestock, predators can impact native wildlife, especially threatened, endangered or otherwise vulnerable species. The current Wildlife Services Program considers the impacts of predators on all components of an ecosystem. In predation management environmental assessments, completed in 1996, impacts of the program on the ecosystem were analyzed. The program, while protecting livestock and wildlife, has no significant negative impacts on the environment.

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 integrating methods including recommending non-lethal methods for producers to implement and by removing predators when they cause damage. The predation management program targets only offending individuals or offending populations.

Methods for predation management are used a selectively as possible to minimize negative impacts to other wildlife. Methods used to control coyotes include aerial hunting, calling and shooting,

trapping, denning and M-44 sodium cyanide ejectors. In addition to removing offending predators, Wildlife Services specialists assist producers in detecting predation and, in the case of cougar and bear losses, in confirming damage for the State sponsored compensation program.

Wildlife Services continues to sponsor research into the development of methods to minimize wildlife impacts, including extensive research into non-lethal methods. Current projects in Utah include monitoring producer implemented non-lethal methods, supplemental feeding of black bears to prevent depredations and fertility control in coyotes to prevent depredations. The Wildlife Services program also assists crop and aquaculture producers in assessing and preventing damage from migratory birds. Most species of birds are protected by Federal law and professional assistance and federal permits are required. Additionally, Wildlife Services can assist producers in developing integrated strategies and locating equipment and suppliers to assist them in preventing losses.

The protection of human safety and health is an important part of the Wildlife Services program. Because of the great numbers of human/wildlife interactions in Salt Lake County, Wildlife Services has an Urban Wildlife Damage Management program there. One full time urban specialist, assisted by the full time volunteer, answer questions from homeowners and businesses on how to prevent damage, lend live traps and provide instructions on humane trapping, and pick up captured wildlife when necessary. Most of the urban calls deal with health risks associated with raccoons and skunks, but the program also has assisted in preventing wildlife diseases, rescuing wild animals, preventing the spread of rabies from bats and capturing and relocating nuisance waterfowl and porcupines. Wildlife Services also responds to several human safety concerns each year prompted by coyotes or cougars in neighborhoods.

Wildlife damage continues to decline in response to the professional Wildlife Services program. Objectives set in the 1996 EA's include keeping lamb losses to less than 5 percent, adult sheep losses to less than 3 percent and calf losses to less than 1 percent. All objectives are currently being met for those livestock protected by the program. Although predator losses are high, losses in the absence of the program would put many producers out of business. Research indicates that lamb losses in the absence of predation management would approach 28% of the lamb crop, and calf losses without management would approach 3.5%. Using conservative estimates, the Wildlife Services program prevents the loss of over \$5 million in livestock annually, with a total economic benefit of \$16 million. Protection of wildlife provides an additional \$1-3 million in benefits to the State of Utah.



# Ag. Marketing & Conservation

Randy Parker  
Director



The Division of Marketing and Conservation has two major objectives: 1) To assist in the economic development of the states agriculture production sector; and 2) To protect and enhance the states natural resources. The division works with farm and ranch producers and Utah agri-businesses in expanding market opportunities, adding value to locally grown commodities, developing new products for market and promoting Utah agriculture in local, national and international markets. In addition, the division works with farmers and ranchers to protect and enhance the soil and water resources of the state through coordinated conservation and resource improvement programs.

## Marketing

A major focus of the marketing section is to assist Utah companies in expanding markets locally, nationally, and internationally while adding value to Utah produced agriculture products. The division continues to help companies in developing marketing strategies and identifying resources to assist them. The division distributes food and agriculture directories to domestic and international audiences and provides opportunities for farmers, ranchers and agri-businesses to investigate international markets.

The Internet has become an information highway that assists the division in marketing Utah agriculture and food in both domestic and foreign markets. Contact information on Utah farmers, ranchers and agri-businesses is now available through the Departments home page

## Local Market Development

The division assisted the sheep industry in receiving a Value-Added Agriculture Product Development (VADG) grant from USDA Rural Development Agency (RDA). The purpose of the grant is to "launch" in local markets the new "heat and eat" flavored lamb products developed by the FY02 \$44,000 Rocky Mountain Organic Lamb Project grant. The project will help the Utah sheep industry totaling \$840,000. The industry assistance comes from several sources: The USDA RDA grant provides \$400,000; UDAF Specialty Crop grant for \$20,000; Utah WoolGrowers Association for \$20,000; and \$400,000 in kind from KSL-Television.

Under an USDA Risk Management Agency (RMA) grant, UDAF organized the Utah Food Strategy Team. The Team is comprised of several industry leaders whose goals include promoting Utah produced and processed agricultural products, insuring all residents of the state receive adequate nutrition, sustaining the economies of the states rural communities and enhancing farmland while protecting the watershed. The Team worked with an advertising agency to develop "Utah's Own" a logo aimed at broadening the recognition of Utah agricultural products and the values generated in our rural communities. An educational effort was mounted through Utah's Own public service announcements.

Recognizing the growing interest in buying fresher and more wholesome, locally grown fruits and vegetables, the states farmers markets have grown from 6 to 21 in the past five years. From community sponsored farmers markets like Salt Lake City's Downtown Alliance to the Utah Farm Bureau, farmers are offered more direct market opportunities. UDAF's Organic Certification program is complimentary to growing consumer interest in a broader range of products available at Utah farmers markets.

The 2002 Salt Lake City Winter Olympics generated international attention for Utah. Division staff hosted international delegations of guests interested in Utah products and agricultural production. Several delegations from the Peoples Republic of China visited Utah this year. Most groups were from regions of China similar to Utah interested in agriculture production in an arid environment with special interest in irrigation technology.

## Product of Utah Program

The Product of Utah program provides Utah companies an opportunity to be identified to local consumers. A broad range of Utah produced and manufactured products are more recognizable to Utah consumers with the help of point of purchase identification, informational brochures and print and electronic media advertising that help drive consumer recognition and interest. In recent years, the program has expanded to include more non-agricultural products, i.e., music, sports and recreation. The Utah image in sports and recreation, especially since the success of 2002 Winter Olympics, has companies interested in using the logo as they open new market opportunities.

There are over 300 companies that have participated in the Product of Utah program since its beginning in the late 1980's. It has even been used by a number of companies as they have developed their export market strategies. Utah is being recognized nationally and internationally for its high quality products and innovation. Many Utah companies use the logo at international trade shows, in retail stores, trade magazines and media advertising. KJZZ television features local products on "Shop Utah" hosted by Margo Watson.

## Food and Agriculture Exports

Following a slowdown in food and agriculture exports in 1998, 1999 and 2000 due to the economic problems in Asia, Utah export sales rebounded in 2001. Asia continues to be the major destination for Utah high-value, consumer-oriented food exports as well as agricultural commodities. Japan leads the way with food and agriculture imports from Utah nearing \$70 million. Canada is second with nearly \$21 million. Global customers continue to discover the quality and competitive prices of Utah food and agriculture exporters. Animal agriculture continues to

pace commodity exports with meat, skins, hides and dairy products leading the way. Utah ranks 6<sup>th</sup> nationally in skins and hides exports at \$61.6 million. Crop exports were lead by alfalfa hay at \$19 million to rank 24<sup>th</sup> nationally. Commodity exports including processed meats and dairy products reached \$207 million in 2001. As with national trends, Utah high-value food exports continue to set new records. Utah's agriculture and high-value, consumer-oriented food exports for 2001 were \$321,594,000.

### **International Market Development**

The division continues to help Utah farmers, ranchers and agribusinesses reach out to global market opportunities. UDAF staff works with the U.S. Department of Agriculture Foreign Agriculture Service (FAS) in identifying international market opportunities. FAS provides financial resources, commodity expertise and foreign market contacts to help companies develop new global markets. FAS coordinates Agricultural Trade Offices around the world that offers U.S. companies valuable in-country assistance. Congress in 2003 appropriated \$100 million for the Market Access Program (MAP) to provide cost-share monies to eligible companies for global market development. Export market development funds are available through state departments of agriculture or through commodity groups and other industry cooperators participating in MAP.

The Western U.S. Agricultural Trade Association (WUSATA), made up of the thirteen western states, is a coordinated effort to access federal resources and develop regional export programs and initiatives. Utah's high-value, consumer-oriented food processors are eligible to receive MAP funds for export development from WUSATA. During FY 2000-01, Utah had three companies that qualified for over \$250,000 in MAP funding. In addition, the division manages outreach projects in Japan, Korea and Hong Kong assisting Utah and western region companies enter these export markets.

The division annually hosts "Export Readiness" training. Companies are invited to participate in one-on-one discussions with a professional export consultant as well as learn what assistance is available through UDAF and WUSATA.

The division also participates in U.S. Livestock Genetics Export, Inc. (USLGE) to assist Utah livestock producers investigate and develop export markets for sheep, beef and dairy genetics. USLGE offers Utah livestock producers a trade organization that coordinates international market development efforts for dairy, sheep, cattle, swine, horses, semen and embryo exports. Division Director Randy Parker serves on the USLGE Board of Directors. The Utah Livestock Directory and targeted cattle directories have been distributed to worldwide audiences. Of major focus is the Northern Mexico market. After five years of drought and reduction in cattle herds, in 2000 the states of Sonora and Chihuahua are rebuilding. Northern Mexico cattle genetics and high desert geography are similar to Utah. This has offered Utah cattle producers a market opportunity. Division staff and an industry representative attended the Mexican National Livestock Convention in June 2002 in San Luis Potosi. In addition, UDAF participated in a trade mission to Argentina to attend the Palermo Livestock Show in Buenos Aires and visited ranches in Entre Rios Province. Utah breeder directories and other industry literature were distributed at both major international livestock events.

### **Great American Food Shows**

The division works with Foreign Agriculture Service to identify global opportunities for introducing high quality Utah food and agriculture products through FAS sponsored food shows. Utah companies interested in investigating new international markets can participate in organized U.S. Pavilions that attract perspective consumers, importers, wholesalers and retailers.

Utah food products were some of the featured American Foods promoted at major events in Hong Kong. City Super, an upscale food retailer, has offered several Utah products to its customers including Bear Creek Country Kitchens soups, Redmond's Real Salt and Stephens Cocoa. Park N Shop, Hong Kong's leading retail food chain with 220 stores, has identified a company growth strategy to introduce more American food products to its customers. During the past year, Park N Shop introduced over 250 new American foods in 18 of their super stores. Utah's Bear Creek Country Kitchens soups and Norbest turkey products were among the new items available to Hong Kong residents.

The division assisted participation of Utah companies in three major international food shows helped by USDA Marketing & Specialty Crop Grant of \$30,000 received by UDAF. These funds assisted Utah companies to participate in SIAL Paris, FOODEX Tokyo and HOFEX Hong Kong. Six companies participated in the Paris show, the world's second largest food show attracting 150,000 attendees. Utah joined with California in featuring products for the Western United States. Joining UDAF in Paris were McFarland's Foods, Gossners Foods, Stephens International Cocoa, International Chocolate Company, Coventry Classics and Redmond Real Salt. Participants surveyed after the show anticipated sales in the following twelve months to exceed \$1 million. FOODEX 2002, held in Tokyo, in March of 2002 is the largest Asian food show attracting over 90,000 attendees. The division coordinated Utah and WUSATA participation in the U.S. Pavilion and offered "Food Show Plus" a service package aimed at helping participating companies achieve better results. Food Show Plus provided advance translation services, a full time translator in the exhibitors booth during the show, Tokyo retail tour and some follow-up assistance. The service helped 14 WUSATA region companies sell \$800,000 at the show and an estimated \$7 million for the coming year. Heber City's Bear Creek Country Kitchens and Redmond's Real Salt also participated.

### **North American Agricultural Marketing Officials**

The North American Agricultural Marketing Officials (NAAMO) was organized in 1921 to allow state agricultural marketing representatives to share ideas, improve state cooperation and develop new marketing ideas. Today, the association has broadened its focus to include both domestic and international marketing and has expanded membership to include Canada and Mexico. Current membership stands at 39 U.S. States, 8 Canadian Provinces and 2 Mexican States. Utah is a long time member of NAAMO and participated in its 81st annual convention held July 2002 in Baltimore, Maryland. The conference provided presentations on marketing activities from Canada, Mexico and the U.S. In addition, valuable information was shared between the countries and their federal government representatives. The NAAMO delegates at the 2002 conference elected Randy Parker President.

### **Risk Management Agency**

In addition to the Food Strategy Team, the RMA is providing Utah with a grant of over \$200,000 to provide outreach programs for Utah farmers and ranchers. In conjunction with Utah State University, the division will provide local farmers and ranchers with RMA training. Utah has been identified as one of 13 underserved states of USDA's Risk Management Agency. The award will allow the division and Utah State University to assist RMA's Education and Outreach Plan for direct producer training, training educational partners, and investment in supportive activities like materials development and promotion.

### **Junior Livestock Shows**

The division administers the legislative mandated and funded program that assists the state's junior livestock shows. Using a formula, funds are allocated to shows to promote youth involvement and offer a quality educational experience. The Utah Junior Livestock Shows 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 youth participants and not for other show expenses. During the past year, 18 junior shows shared the \$20,000 appropriated by the legislature to assist in this youth development program.

### **Utah Horse Racing**

In 1992, the Utah Legislature passed the Utah Horse Racing Act that established a regulatory program for monitoring the horse racing industry. A five-member Commission is appointed by the Governor and approved by the Senate that oversees the process and makes periodic changes based on needs or industry input. The division administers the law because of its importance to market value of Utah horses. Commission sanctioned tracks and races are important in establishing recognized times for Utah Quarter Horses. During the past year, races were sanctioned at Dixie Downs in St. George and South Jordan Equestrian Park. In 2002-03, the Utah Horse Racing Commission worked out a protocol with the Thoroughbred industry (Equibase) to accept Utah Thoroughbred "works" times. Under Jockey Club rules, Thoroughbred times are not recognized from any jurisdiction that does not have pari-mutuel wagering. This agreement helps establish the quality of Utah Thoroughbreds as they compete outside of the state. The Commission is recognized by national and international racing bodies. Times of races and works help establish the quality and value of Utah horses. Without an internationally recognized system, millions of dollars of value would be lost by Utah's horse industry.

### **Soil Conservation**

The soil conservation section helps enable Utah's private land managers to protect and enhance their soil, water and related natural resources. Agricultural managers are still the majority holders of private lands in the state. Their positive land management actions results in many short and long-term public benefits. This section strives to help create a political environment where representatives of private land managers can direct the local state national land and watershed conservation and development programs in a voluntary, incentive based process.

The section provides staff support to the Utah Soil Conserva-

tion Commission (USCC), which is chaired by Commissioner Peterson. This Commission is a policy making body of the state that coordinates, develops and supports soil and water conservation initiatives and programs. The USCC directs financial and administrative support to Utah's 38 Soil Conservation Districts (SCD). These districts are local units of government charged by state law to help private land managers protect soil, water and related natural resources. This Commission and the districts work closely with their conservation partners to help solve land and water resource challenges.

The USCC working through the Department has on going memoranda agreements and contractual arrangements with the SCD's state association, the Utah Association of Conservation Districts (UACD), to provide administrative support to the districts and technical assistance to private land owners. See <http://www.uacd.org/> to learn more about UACD. Technical assistance provided by UACD and the SCDs augment the support that has historically been provided by USDA. Project planning, implementation and resource protection applied to the land is tracked and documented on USDA Natural Resource Conservation Service (NRCS) Performance & Results Measurement System (PRMS). Data for Utah can be found on the Internet site <http://prmsreports.nrcs.usda.gov/>

The USCC with staff support from the Department has the legal responsibility to administer the state's Agriculture Resource Development Loan (ARDL) program. The USCC has developed an administrative structure for the ARDL program so local SCDs are able to promote and benefit from ARDL projects within their boundaries. Administrative ARDL policies are kept current by the USCC. Most of the results of resource protection funded by the ARDL program are included in NRCS PRMS described above since most projects also receive Federal financial grants. Environmental Quality Section

### **Groundwater and Rangeland:**

The Department's agricultural groundwater, well testing and rangeland monitoring programs continue to grow and flourish. Electronic annual reports about each program are available on the Department's web site: <http://ag.utah.gov/mktcons/groundwater.html>.

In 2002, the groundwater-sampling program collected 325 samples from all seven Utah Association of Conservation Districts zones. The samples were tested for a variety of parameters including electrical conductivity, temperature, pH, hardness, sodium and bacteria.

None of the samples contained pesticide residues. While bacteria continued to be a problem throughout the state, fewer wells tested positive for coliform bacteria in 2002 than in 2001. In 2002 twenty-seven percent of the wells tested had measurable coliform. Of that number, only three percent tested positive for E-coli.

The rangeland-monitoring program now has its annual reports from 1996 to 2001 available in hardcopy, on CD-ROM and on the Internet. During 2002 the focus was on the central region of the state. This includes Juab, Utah, San Pete and Millard counties.

### **Non-point Source Pollution:**

Utah's agricultural non-point source (NPS) pollution control program continues to be funded largely by federal grants through Section 319 of the Clean Water Act. UDAF continues to serve on an interagency committee working on the inventory and assessment of Animal Feeding Operations (AFOs). The Utah AFO Strategy projects continue to be supported on an incentive basis from resources provided by the EQIP program of USDA, and 319 EPA funding.

By early 2003 the CAFO assessment teams had assessed nearly 2,000 operations statewide. That assessment process was scheduled to conclude by mid-summer 2003. Following the assessment, those operations needing environmental improvements will have comprehensive nutrient management plans written and then make any needed improvements. Some operations have already finished their plans and started making improvements.

Watershed restoration projects continue throughout the state. Chalk Creek in Summit County continues to make vast improvements in the watershed. A major sprinkler irrigation system has been completed and is in its first full year of operation. This system should save water and improve water quality by greatly reducing erosion to Echo Reservoir and the Weber River. Work also continues in other areas of the state including Beaver County and Cache County.

In the area of information and education, Utah is leading a national effort to develop a new NPS media campaign and outreach effort. The effort will be focussed at local communities and is designed to give local watershed committees, soil conservation districts, storm water coordinators and other local water quality leaders the tools they need to work with the media and the general public to reduce NPS pollution.

### **Low Cost Loan Programs**

The division is responsible for several loan programs to help the agriculture community and others achieve various worthwhile goals for productivity, efficiency and environmental benefits for the people of Utah. At present the division has portfolios totaling nearly than one thousand loans with total assets of more than \$33 million. Loan quality generally high with low delinquencies and a history of minimal losses. The division cooperates with the Department of Environmental Quality (DEQ) in managing one loan program, and is in process of setting up another program with that agency. Cooperation with other departments of government provides for greater efficiency with minimized duplication of effort and provides the taxpayers with more efficiency in government. The existing programs are:

#### **Agriculture Resource and Development Loan**

This program has the largest portfolio, consisting of about 900 loans and \$21 million outstanding. The program is managed by the division for the Utah Soil Conservation Commission in cooperation with the soil conservation districts throughout the State. The purpose of the program is to finance projects for land owners to provide for greater efficiencies in agriculture operations, range improvements, water and soil conservation, disaster assistance and environmental quality. The loans carry a maximum term of twelve

years at three percent interest and include a four percent administration fee that goes directly to the Utah Association of Conservation Districts (UACD) to help finance their operations. The program is a revolving fund which is growing at the rate of about \$1 million per year. The program has contributed to the State's economy and environment by providing millions of dollars for irrigation systems and other projects that have been particularly valuable during the recent drought.

### **Rural Rehabilitation Loan Programs**

These programs, funded by both State and federal monies, total about \$6.9 million, and consist of about 75 loans. The various purposes of the loans are to provide financial assistance to producers with financial problems of various causes, to assist beginning farmers to obtain farmland and to help provide financing for transfer of ownership of farms and ranches from one generation to another. They are essentially loans of last resort requiring that applicants be declined by conventional commercial lenders. Terms range up to a maximum of ten years, and interest rates charged have been five percent or less.

**Petroleum Storage Tank (PST) Loans.** This program is managed for DEQ to provide financing for property owners who have underground storage tanks that require removal, replacement or remediation. The portfolio consists of about 60 loans totaling about \$2 million. Loans range in size up to \$45,000 for a maximum ten year term at three percent interest.

The division is in process of developing another program with DEQ's Division of Water Quality to finance projects for eliminating or reducing non point source water pollution on private lands.



Utah's Own

# Animal Industry

Dr. Michael R. Marshall  
Director



The Animal Industry Division of the Utah Department of Agriculture and Food has six main programs:

- 1) Animal Health — with special attention to animal diseases that can be transmitted to humans.
- 2) Meat and Poultry Inspection — to assure wholesome products for consumers.
- 3) Livestock Inspection (brand registration and inspection) — to offer protection to the livestock industry through law enforcement.
- 4) Fish Health — protecting the fish health in the state and dealing with problems of fish food production and processing.
- 5) Elk Farming and Elk Hunting Parks
- 6) Organic Food Program / Investigation and Compliance

Major accomplishments in these areas during the past year are as follows:

## Animal Health

Disease free status was maintained in the following disease categories:

\*Brucellosis \*Tuberculosis \*Scabies \*Pseudorabies  
\*Salmonella pullorum \*Mycoplasma gallisepticum

Disease monitoring programs continued from prior years include those for heartworm, equine encephalitis, equine infectious anemia, rabies, brucellosis, tuberculosis, pseudorabies, salmonella sp., mycoplasma, West Nile Virus, etc. The Division participated in a West Nile Virus Surveillance program in partnership with the Utah Department of Health, the Utah Division of Wildlife Resources, and the Utah Mosquito Abatement Association. The Division of Animal Industry role was to produce an updated pamphlet alerting horse owners concerning this disease, and to develop a training CD on West Nile Virus.

The Division has actively promoted various Health Assurance Programs and has served to certify participants. Such programs as Utah Egg Quality Assurance Program, Utah Cattle Health Assurance Program, Johne's Disease Surveillance, Beef Quality Assurance, Trichomoniasis testing, the National Poultry Improvement Plan, and others are included in this effort. 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 and to acquaint them with new programs.

The Division veterinarians monitored livestock imports into the state by reviewing 13,238 certificates of veterinary inspection and 1,950 livestock entry permits were issued. Approximately 110 violations of Utah import regulations were investigated, and 2 citations were issued with fines of \$284 collected. Over 18,000

ear tags were issued to veterinarians for use in the Trichomoniasis testing program.

The reported incidence of Heartworm in Utah remained the same as 2001, at 79 reported cases. The BLM and the Ute Tribe each gathered over 250 free ranging horses in the Hill Creek area and Department mandated monitoring for Equine Infectious Anemia revealed 6 cases of EIA in that area. Further surveillance for EIA is planned for 2003. Testing of nearly 15,000 bulls for Trichomoniasis identified 50 infected bulls in 2002.

The division is responsible for licensing hatcheries, qualified feedlot operators, and swine garbage feeders in the state. The number of hatcheries in the state continues to increase in the game bird industry. The division also administers the National Poultry Improvement Plan in the state. 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.

Homeland Security has been a focus of the Division in 2001. The threat of agri-terrorism and the possibility of foreign animal disease being introduced to the state make this a top priority. The Division was successful in obtaining federal funding for developing a mobile emergency response capability. The Division has offered training and consultation in biosecurity measures to various groups.

The Animal Health section 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 the division, using private veterinarians on contract with the state. More than 500 weekly livestock sales conducted by 8 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. The division dispensed 43,070 doses of brucellosis vaccine and 71 vials of tuberculin for TB testing. The brucellosis vaccine program will be discontinued in the future due to budget constraints.

## State and Federal Cooperative Laboratory

The State and Federal Cooperative Laboratory, which was previously housed and administered by the Department, was closed in June 2002 and the work load was transferred to the Utah Veterinary Diagnostic Laboratory in Logan in a budget saving effort.

## Meat Inspection

There was only one personnel change during 2002 and that occurred when the Utah Meat and Poultry Inspection Program

manager, Dr. Chris Crnich, left on September 30 to fill the Director's position in the Division of Regulatory Services. In December 2002, Dr. Wyatt Frampton was promoted to the manager's position from the field veterinarian's staff.

The number of Utah inspected meat processing facilities throughout the state has grown slightly this past year. We have added three new processing facilities to our fully inspected state plants list. We routinely answer calls from individuals that are interested in pursuing an interest in the meat industry. Our staff is periodically asked to review and assist new plant managers in preparation of facilities to come under state meat inspection. We work to allow these individuals the opportunity to produce meat products in a clean, well built, and sanitarily maintained facility that fits the minimal requirements established by the United States Department of Agriculture.

The use of computers and software systems continues to make our jobs easier and more efficient. The front line inspector has at his fingertips all the meat regulations and notices and receives updates almost weekly. Information from the office can be passed on to each of the inspectors in minutes compared to trying to pass the information via the telephone or mail. By the end of 2003, we hope to have the Performance Based Inspection System (PBIS) installed so that even the state plants will be on the system so the individual inspector can download the performance tasks and upload the completed tasks for the plant that he/she is inspecting.

Microbiological testing has been and continues to be an important element in verifying that the HACCP process of inspection is working as intended. A total of 497 samples were collected by the meat inspection staff and tested for Salmonella sp. 108 samples were collected from Ready To Eat (RTE) products and tested for Salmonella, E. coli, and Listeria. In addition, the individual plants collected 234 samples for generic E. coli testing. All samples were negative. Our goal is to maintain the highest quality and safety that the Utah meat consumer has been used to up to this point and validate that confidence level with appropriate and timely testing.

During the past year, over 2,968 hours of training have been given to our staff. We feel that this training is vital in the effort to keep a highly trained and knowledgeable inspection staff. In the future, an even great emphasis will be placed on training.

#### **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 accidental straying or intentional theft of livestock. In addition to inspecting all cattle and horses at the state's eight weekly auctions, field inspections are done on all livestock prior to changing ownership, leaving the state and going to slaughter.

During 2002, a total of 729,511 individual cattle, horses and elk were inspected. Livestock worth an estimated \$1.1 million was returned to their proper owners.

Renewal of about 23,000 livestock brands and earmarks was accomplished in 2002. As mandated by law, the process occurs every five years in order to keep brands current. The next renewal will take place in 2005. In addition to each brand owner being listed in the Brand Book, the department issued everyone a

laminated wallet-size proof of ownership card. The ownership card is intended for use during travel and when selling animals at auctions. The new Brand Book and supplements are available to the public at a cost of \$25.00.

The brand department started collecting the cattlemen's part of predator control money in 1996. During 2002, livestock inspectors collected \$123,000 in predator control money. This money, like the beef promotion money, which has been collected by the brand inspectors for many years, will simply be forwarded to the Wildlife Services Program for its use. Sheep men will continue to have their allotment collect by the wool houses and forwarded to the department.

Monies collected for beef promotion equaled \$659,221.

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 signs requiring all livestock hauling vehicles to stop. This is an effort to help prevent diseased animals from entering the state and stolen animals from leaving the state. A new port-of-entry was added in 1998 in Loma, Colorado on I-70.

A heightened awareness in the meat industry has also resulted in the upgrading of the Farm Custom Slaughter Program to insure that meat derived from home grown, non-inspected livestock is prepared under the best conditions possible.

Finally, in an effort to prepare for animal health concerns and problems, the livestock inspectors have been involved in the GPS mapping of the state's "high density" livestock/poultry and processing sites.

#### **Elk Farming and Hunting Parks**

During the 1997 legislative session, the Domestic Elk Farming bill was passed allowing the farming of domestic elk on an individual's property. The brand bureau has been asked to regulate this new industry. In 1999, an amendment to the original law allows the licensing of domestic elk hunting parks. Livestock inspectors are involved in the inspection of new facilities and elk as they come and go from each licensed farm or park. They help verify identification, ownership, health, and genetic purity of every animal. Within the first five years of the passage of this law 42 new farms and six hunting parks have been licensed with a total of 2181 elk on inventory. An eight-member elk advisory council was formed to make recommendations and give direction to this industry.

#### **Fish Health Program**

By the end of FY 2002, thirty-three commercial aquaculture facilities (twenty facilities with live fish sales, ten facilities with dead fish sales, one fish processing plant, and two combined fish processing plants and dead fish sales) and 104 fee fishing facilities were registered with the UDAF, Fish Health Program. This is a 12% increase in licensed facilities over 2001. There are four commercial growers actively involved in fish brokering. Fourteen new applications, (twelve fee fishing sites and two aquaculture sites) were filed this year. This shows the increased interest in aquaculture in Utah. One aquaculture facility was closed for live fish sales due to whirling disease. One facility cleaned up

their whirling disease problem and is again available for live sales. Implementation of five biosecurity and health safety plans continued in an effort to prevent the spread of whirling disease. The number of species approval requests was 31. This represents an 85% increase over 2001. New species approvals include Arctic char, tilapia, marine penaeid shrimp and freshwater prawns. Major efforts are being made to develop these new areas of aquaculture in Utah.

Services extended to clients and the public include: 72 on-site consultations and distribution of information on aquaculture and fish diseases; on-site water quality tests conducted at 33 sites; ten diagnostic cases involving fish losses or water quality work were submitted respective to the Utah Veterinary Diagnostic lab and Utah State University (histology, bacteriology, parasitology, water quality, pesticide/heavy metals); issuing and renewing CORs to aquaculture facilities, fee fishing, brokering, and fish processing plants; inspecting fish at 29 facilities including over 2,588 fish sampled (1,676 fish for bacterial kidney disease; 2,091 for viruses; 1740 for whirling disease; 360 for other; 249 warm water fish); issuing 37 fish health approvals (21 to instate facilities and 16 to out-of-state facilities). Fifty-seven entry permits (16% increase over 2002) were issued for fifteen species of aquatic animals for a total of 2,722,024 fish and eggs and 23,300 additional lbs. of fish imported into Utah.

In August of 2001, the Fish Health Program resumed inspections of Utah brine shrimp processing plants. Twenty-three brine shrimp companies were inspected for a total of 43 quarterly inspections in 2002. These plants were inspected for sanitation, cleanliness, cyst disinfection, product testing and verification to determine if foreign cysts are imported to Utah, and also to ensure that waste products are disposed of properly.

During the year, the fish health specialist received certification as an American Fishery Society Fish Health Inspector. The Fish Health Program participates in continuing education lectures and presentations to enhance and promote the knowledge of fish health and aquaculture.

One issue of Aquaculture in Utah newsletter was published in 2002. Articles dealt with the New Zealand mud snail, late fee assessment, fish farming, mosquito fish, new fee-fishing and aquaculture facilities, and properly maintaining fish feed.

Two proposals seeking funding were submitted by aquaculture facility owners and reviewed. One major investigation of rule infractions was undertaken in 2002. This investigation is still in process. The number of Fish Health Policy Board meetings attended was four. The number of nuisance species meetings attended was two. One memorandum of understanding was developed with DWR and the Mosquito Abatement Districts, which allows for the reasonable testing of mosquito fish.

The Program is dedicated to the continuous improvement of fish health programs, reduction of unnecessary paperwork, customer satisfaction and remaining within the budget. It is the primary aim of the Fish Health Program to prevent and control the spread of fish diseases and still assist aquaculture operators to succeed in business. Specialists work overtime to complete these tasks, and this is done within current budget constraints.

### Organic Certification/Investigation and Compliance

The Agriculture Investigator is responsible to protect Utah agriculture producers and consumers by licensing and bonding all individuals who purchase and resell agricultural commodities. The legislature has re-emphasized the need to protect Utah producers, and aggressively seek out any person who is a dealer, broker or agent purchasing for resale or commission or is entrusted with the management, control or disposal of any agriculture product for a producer. The investigator will work with Local County, State and Federal authorities in enforcing this act. The investigator also works with the eight Livestock Auction Markets and several buying stations in the state, which are bonded and licensed. In conjunction with the Attorney Generals Office, the specialist works with Division Directors enforcing actions resulting in Administrative Hearings.

Utah was accredited by the United States Department of Agriculture National Organic Program to certify organic products. With this certification, Utah has been inspecting and certifying organic farmers, livestock producers, processors/handlers and wild crop harvests. The program has certified beef, lamb, cosmetics, fruits and vegetables as well as coffee and grains. This program was implemented at the request of organic producers in Utah. The program is funded by reimbursement of fees charged to the producers. Organic foods are offered as an alternative for consumers. Certification offers a third party verification that a set of standards meeting the criteria of the term "Organic" have been met, and a quality system is in place for the production and handling of organic foods. Persons certifying under these standards are allowed to use the USDA or UDAF logo on the packaging representing "Certified Organic" product with ingredients greater than 95% organic. Any product that is called organic is required to have this third party verification and inspection. Investigators will be involved in surveillance at farmers markets, grocery stores and roadside stands enforcing organic regulations and verifying certified organic operations.



# Chemistry Laboratory



Dr. David H. Clark  
Director

Laboratory Services operates as a service for various divisions within the Department of Agriculture and Food. The division laboratories provide chemical, physical, and microbiological analyses. All samples analyzed in the laboratories are collected and forwarded by various field inspection personnel from the Divisions of Plant Industry, Regulatory Service, Animal Health, and Marketing and Conservation Programs.

Feed, fertilizer, meat and meat products, pesticide formulation, and dairy products are tested for specific ingredients as stated by the associated label guarantee. Some products are also examined for the presence of undesirable materials, such as filth, insects, rodent contamination, adulterants, inferior products, and pesticide residues.

The Dairy Microbiology Laboratory is responsible for testing grade "A" raw milk, finished dairy products, and administers a industry laboratory certification. The laboratory is certified by FDA to perform standard plate and coliform counts, microscopic and electric somatic cell determinations, test for antibiotic residues, test for proper pasteurization, and measure fat and water content. The laboratory is also certified as the FDA Central Milk Laboratory for the State of Utah, and our supervisor serves as the State Milk Laboratory Evaluation Officer (LEO) which has jurisdiction over the certified milk labs within the State. Last year there are 23 facilities with 120 analysts under the LEO's jurisdiction. The LEO is responsible for on-site evaluation and training of all certified analysts throughout the State and along with the dairy laboratory staff, administer a yearly proficiency testing program for all industry analysts.

The Meat Laboratory analyzes meat and meat product samples obtained during inspections of plant and processing facilities that conform to Federal and State standards. Tests are made for fat, moisture, protein, sulfites, and added non-meat products to ensure label compliance of these products. Antibiotic residues and cross-contamination from other species are also monitored. We also analyze samples from

Montana Department of Agriculture when requested. Samples (meat and carcass swabs) from processing facilities are also tested for the presence of Salmonella on a monthly basis.

The Pesticide Formulation Laboratory is primarily concerned with testing herbicides, insecticides, 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 presence and subsequent levels of herbicide, insecticide, rodenticide, and fungicide residues in plants, fruits, vegetables, soil, water, and milk products. These samples are submitted when inspectors suspect there may be a misuse of the application of the pesticide. Milk samples are tested once a year to for pesticide contamination and maintain compliance with FDA.

Commercial feed (agricultural and pet) samples are tested for moisture, protein, fat, fiber, minerals, toxins, antibiotics, and vitamins in the Feed Laboratory. Seed moisture determinations are also performed for the seed laboratory. The Fertilizer Laboratory tests solid and liquid fertilizer samples for nitrogen, phosphorus, potassium, and trace elements. 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. The samples are checked to see if the complaints are valid, and if they are, turn the matter over to departmental Compliance Officers for follow up action.

Ground and Surface Waters are monitored for the presence for pesticides, nitrates, and we also test for 25 elements and other water related parameters. This data is combined with other water data collected in the field to provide a picture on the quality of the state aquifers.



**Accomplishments:**

As shown in the accompanying table, number of tests declined for some products, which may have been due to budgetary cutbacks. Number of surveys by inspectors has been reduced with a subsequent reduction in number of samples submitted for testing. We continue to provide a monitoring program for food safety, however the coverage is severely reduced.

The dairy laboratory completed their FDA audit with no deviations on procedures, equipment performance, or staff performance. Currently, there are twenty-two (22) facilities with 128 analysts under the LEO's jurisdiction.

We continue to do all of the analyses on the ground water samples that were previously done at Utah State University with no apparent affects on laboratory production and quality.

No pesticides have been detected in dairy producer samples collected last year and the ground water samples have shown a similar trend.

Meetings with chemists and supervisors from the different divisions continue to be held to discuss status of ongoing programs, problems that are arising, new program needs, and changes due to budget shortfalls.

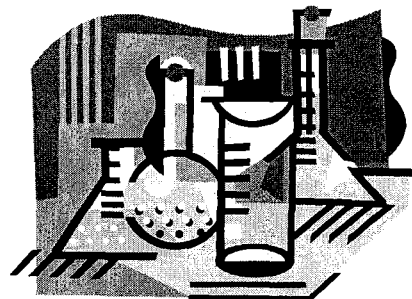
We continue to work with USU Analytical Laboratory and UDAF Grain Inspection on quality control for hay testing.

The division continues to perform very well on the check sample programs administered for milk, meat, feeds, fertilizers, and pesticide residue and formulation programs.

The following is a breakdown of sample analyses performed in the various programs in the Laboratory Services Division for the years 2000, 2001 and 2002.

	2000	2001	2002
Federal Meat	193	84	423
State Meat	1,247	1,033	1,058
Montana Meat Samples	49	11	122
Dairy Microbiology	18,295	9,787	8,846
Fertilizer	699	714	739
Feed	837	1,335	1,491
Pesticide Formulation	0	23	9
Pesticide Residue	31	18	29
Special Samples	40	22	81
State Groundwater	22,259	31,790	31,029
Pesticide Residue in Milk	1,860	9,553	2,850
<u>Salmonella</u>	<u>257</u>	<u>238</u>	<u>162</u>
<b>TOTAL</b>	<b>45,767</b>	<b>54,608</b>	<b>46,839</b>

In addition to the above analytical work, the staff typically performs anywhere from 5000-7000 determinations on various check samples. The check sample programs are vital and essential for maintaining quality control, quality assurance, and verifying accuracy of results on routine samples. These check samples are also used to help develop new procedures.



# Plant Industry

G. Richard Wilson  
Director



The Division of Plant Industry is responsible for ensuring consumers of disease free and pest free plants, grains, seeds, as well as properly labeled agricultural commodities, and the safe application of pesticides and farm chemicals.

## 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.

During 2002, there was approximately 803 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 300 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 2002 are summarized below:

### Apple Maggot and Cherry Fruit fly

The Apple Maggot survey and detection program in Utah requires the efforts of the State Entomologist, one program supervisor, three field scouts and necessary secretarial help. The program was implemented to provide for our continued participation in export markets. In 2002 nine hundred (900), traps were used in the adult survey. Since the programs beginning in 1985 property owners are contacted annually on orchard spray management techniques and removal of un-cared for and abandoned orchards. Tree removal during 2002 exceeded 1000 trees in abandoned orchards.

### 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 2002, twenty thousand (20,000)

colonies of bees were inspected with the incidence of disease below 2.5 percent.

### African Honey Bee

A survey and detection program for African Honey Bee 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. Considerable education and public awareness activity has occurred since the African Honey Bee was discovered in Misquite, Nevada in the summer of 1999.

### 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 with USU has provided beneficial parasitic wasps that prey on Cereal Leaf Beetle. These beneficial parasites have now spread to all northern Utah counties helping to reduce populations significantly. Additional cooperative investigations by Utah State University and the Utah Department of Agriculture and Food into the biology and life expectancy of Cereal Leaf Beetle in compressed hay bales may one day allow shipments of hay from infested areas of the state during certain times of the year.

### 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 zero (0) in 2002. The major benefits of this program are: Cost effectiveness, Public nuisance reduction, Forest and natural resource protection, and Watershed protection.

Eradication efforts continue to show significant progress and trapping programs will remain vigorous.

### Cricket/Grasshopper

The 2002 Fall Rangeland Insect Survey was completed the last week of August. Information from this survey indicates that we may have 1,295,850 acres infested with grasshoppers in 2003, and possibly 1,200,000 acres infested with Mormon Crickets. The information from the fall 2002 survey indicates the population of both grasshoppers and Mormon Crickets may infest

4,495,000 million acres in 2003. Insect damages ranging upwards of 22.5 million dollars may be expected again this year. Large populations of these voracious insects in 1998, 1999, 2000, 2001 and 2002 prompted the Governors Declaration of Agricultural Disaster. Limited Federal and limited State funds provided some relief during 2002 but left many private farmers, ranchers and homeowners to use their own resources to control the infestation.

#### Fertilizer Program

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

Major functions performed in this program in 2002.

Number fertilizer manufacturers/registrants	224
Number of products received and registered	2075
Number of products registered because of investigations	25
Number of fertilizers sampled, collected, and analyzed	272
Number of fertilizer analysis performed	599
Tonnage sales in Utah (7/1/99-6/30/00)	102,010
Number of samples that failed to meet guarantee	6
Guarantee analysis corrected	6
Number of inspection visits to establishments	575
Number of violations of the fertilizer Act	4
Number of blenders licensed	17

#### Unwanted Pesticide Disposal Program (discontinued 2002)

Past collections during previous nine years.  
152,601 pounds (76.3 tons) collected and disposed.

#### Pesticide Product Registration Program

1. EMERGENCY USE PERMITS (Section 18).
 

1997	-	1
1998	-	1
1999	-	2
2000	-	2
2001	-	3
2002		4
2. SPECIAL LOCAL NEEDS (SLN).
 

1 SLN labels filed in 2002
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3. EXPERIMENTAL USE PERMIT (EUP)
 

2001	-	1
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#### Pesticide Product Registration

Number of pesticide manufacturers or registrants:	846
Number of pesticide products registered:	8,949
Number of new products registered as a result of investigation:	675
Number of violations of the Pesticide Act	25
Number of product registration requests by field representatives:	75

#### Nursery Inspection Program

Number of licenses issued to handlers of Nursery stock	575
Number of Nursery Inspections conducted	750
Number of violations of the Nursery Act	35

#### USDA Private Applicator Restricted Use Pesticide Record Program

Number private applicators records surveyed	100
Percent private applicators using RUP's products	55%
Percentage of elements recorded as required	100%
Percentage of private applicators without records	0

#### Shipping Point and Cannery Grading Program

PRODUCE	Number of Inspection	Pounds in spection
Apples	3	73,920
Cherries, Sweet	0	0
Cherries Tart	8	371,998
Onions	606	16,747,275
TOTALS	617	17,192,192

#### 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 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 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 and does WPS training as necessary.

#### Endangered Species Pesticide Program

Utah has developed an Endangered Species Pesticide Plan. This 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.

### 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 Enforcement Program

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

No. of inspections of pesticides sales establishments:	11
No. of physical pesticide samples collected:	25
No. of investigations of pesticide uses:	98
No. of violations:	33
No. of pesticide applicator training sessions:	20
No. of applicators certified Commercial, Non-Commercial, Private:	4,522
No. of pesticide dealers licensed:	86

### 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 2002-2003 is summarized below:

Number of seed samples tested:	1949
Number of violations determined:	33

### Seed Testing and Seed Law Enforcement

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 germination, purity, and presence of noxious weeds, although a number of other tests are performed upon request. 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. The thirteen agricultural field representatives located throughout the state made approximately 1,246 visits and inspections. 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

The Division Weed Specialist coordinates weed control activities among the county weed organizations and the agricultural field representatives.

Surveys of serious weed infestations are conducted and control programs are developed through the county weed supervisors, county weed boards, and various landowning agencies. 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.

Noxious Weed Free Hay Certificates .

### Activities in Hay and Straw Certification

Inspections in 24 counties  
Inspections for 94 producers  
Approximately 213,304+ bales inspected  
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 2002 are summarized below:

Number of feed manufacturers or registrants contacted:	613
Number of feed products registered:	6700
Number of analysis requested of chem. Lab:	1375
Number of feed samples collected and tested:	424
Number of violations:	38

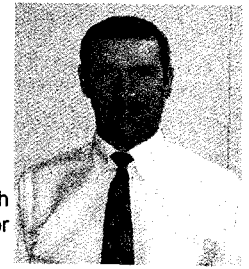
### Grain Inspection

The Federal Grain Inspection Service provides under authority of Title 4, Chapter 2, Section 2, and under designated authority grain inspection services. 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:

Number of samples:	11,295
Number of miscellaneous tests conducted:	19,642
Total number of activities performed:	30,937

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



Dr. Chris Crnich  
Director

UDAF works towards accomplishing the food program's mission of ensuring:

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

The Division of Regulatory Services has been involved in the oversight and compliance of products utilized by consumers of Utah agricultural products and services. Our staff prides itself in the uniform and sound practices of standardization of all their work to ensure a wholesome, clean, and uniform service and product function through out all the state. This report will outline each of the five programs within the division and the unique specialties each program brings to the oversight of Utah's products and services. In this new era of security, our division has lead the way in promoting extra awareness and observation of food facilities and plant operations that produce food products for Utah consumers. We are dedicated to provide helpful information and another set of eyes to be constantly vigilant in the safety of our food supplies.

This year has also seen the advancement of long-time Director of Regulatory Services, Kyle Stephens, to Deputy Commissioner of Agriculture and Food for the state of Utah. Under his leadership, the division has grown and expanded the services offered to the citizens of the state. His skills and talents will be utilized even more effectively as the deputy commissioner of agriculture. Dr. Chris S. Crnich has been appointed as the new director of regulatory services. He comes to the Division from the division of animal industry where he had worked for almost five years as a field veterinarian and most recently as Manager of the Meat and Poultry Inspection Program. His prior professional career as a veterinarian in private practice was dedicated to a large animal practice. He had strong emphasis on food production and spent a great deal of time in the regulatory aspect of practice at several livestock auctions. He has spent time as an Air Force Reservist and currently is the 419<sup>th</sup> Medical Squadron Commander at Hill AFB, Utah. The varied background and training experiences of Dr. Crnich lend well to the regulatory community and heightened training and threat levels that we are currently enduring.

## 2002 Olympics

The Utah Department of Agriculture and Food (UDAF) was very busy last year. Much effort was expended planning,

coordinating, and collaborating food safety for the Olympics. Regulatory Services was a member of an Alliance called the Environmental Public Health Alliance or EPHA. The Alliance was comprised of six local health departments, UDAF, the Department of Health, and the Department of Environmental Quality. The federal Food and Drug Administration, Environmental Protection agency and United States Department of Agriculture also participated in EPHA. The Alliance formed work groups and committees to cover the broad public health and environmental aspects of the Olympics. EPHA's planning ensured risks were minimized and problem areas were addressed and resolved quickly.

In the arena of food safety, a highly trained cadre of local, state, and federal employees conducted food inspections at venue and non-venue sites. Over 4,291 food inspections were performed during the Games. Statistics for the Olympics indicated there were 2,126 food safety inspections conducted at venue sites that involved 1,756 man-hours at 294 facilities. There were 1,352 food safety inspections at non-venue sties with 858 man-hours at 228 facilities; and 409 temporary mass gathering inspections at 29 facilities for a total of 1,318 man-hours.

UDAF's Division of Regulatory Services participated on the steering committee for EPHA, the drinking water committee, the food safety work group, the import committee, the food training committee, the enhanced operations committee, the rapid response committee, and the venue team leader committee. These teams designed training programs, inspection sheets, standardized procedures and policies, wrote rules and put together systems to ensure public and environmental health was well protected during the Olympics. Industry and the Salt Lake City Organizing Committee (SLOC) appreciated the unified approach.

Within our Division, we put together an inspection team. Team members were the environmental health specialists in the counties where the venues were located. UDAF had four main areas of responsibility for the Olympics. First, we provided food safety inspections for the Sysco Warehouse, which was the sole food supplier for the Olympic venue sites. Second, we inspected Compass, who manufactured the mountain packs. Over 320,000 mountain packs were manufactured for the volunteers during the Olympics. During the paralympics 20,000 mountain packs were made. Third, UDAF inspected Restaurant Associates, a Compass subsidiary that manufactured and catered food for the USA house, the opening, and closing ceremonies at Rice Eccles Stadium, and the Medals Plaza. Fourth, UDAF employees were on a rapid response team designed to act as back up or emergency support for the local county health departments if additional resources were needed. It was a challenge for UDAF to provide Olympic food inspection coverage as well as the routine food program coverage with no additional resources.

The 2002 Winter Olympics were a success. The time spent planning and implementing the plan was well worth it. The public health aspects of the Olympics went extremely well. No major food borne illnesses were reported.

### New Rules

This year the Utah Department of Agriculture and Food (UDAF) adopted USDA's National Organic Program. Every Division within UDAF played a role in the implementation of this program. Regulatory Services performed inspections at organic processors. An interesting note is that a facility can be certified as "Organic" without meeting any food safety or construction standards.

UDAF is in the process of implementing 21 CFR Part 120 or the Juice HACCP regulations. We have identified the dairy and juice processors within the state and are educating them so they can be in compliance by January 2004.

### Food Program

The number of facilities in a given category and the number of inspections conducted in each category are indicated in the table.

ESTABLISHMENT TYPE	INSPECTIONS 2002	
	NO.	INSPECTIONS
Bakeries	389	720
Grain Processors	9	14
Grocery Stores	1,204	1,789
Meat Departments	341	665
Food Processors	433	613
Warehouses	265	296
Water Facilities	26	41
TOTAL	2,667	4,138

### Food Product Control

The Utah Wholesome Food Act includes two main areas of responsibility: adulteration and misbranding. A food is adulterated if it contains any poisonous substance, which may render it injurious to health, or if it has been produced or stored under conditions whereby it may become contaminated with filth, or rendered diseased, unwholesome, or injurious to health. Misbranding is when food products are improperly labeled or missing key information.

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 Destructions, Hold Orders and Releases. In 2002, twenty-five (25) hold orders involving 42,644 pounds of food and six hold order releases were issued amounting to 7,738 pounds of food. Forty-six (46) voluntary destructions were agreed upon involving 81,565 pounds of food. The food was destroyed because it was suspected of being adulterated.

### Warning Notices

When voluntary compliance cannot be achieved, we take additional regulatory action in the form of Warning Notices and Administrative Action. In 2002, UDAF sent out 78 Warning Notices concerning non-compliance with the Utah Wholesome

Food Act (WFA) and the Utah Food Protection Rule (FPR). Nine Cease & Desist orders protect the public from food processed in an unsanitary manner.

### Citations

Eight citations were issued in 2002. Six were issued to supermarkets, one to a warehouse, and one to a bakery. Citations continue to be an effective enforcement tool.

UDAF was given an FDA grant to enhance food safety. We partnered with the Safety Food Institute to develop a grocery store training program. FDA conducted a baseline survey at food establishments. FDA identified five practices or violations that were out of compliance over 40% of the time. Training modules are being developed to address these five risk factors. UDAF conducted pre-training inspections to gather data to identify how many of these risk factors were present at Utah's food establishments. Employees will then be trained by viewing a five to seven minute interactive food safety lesson. Post-training inspections will then be conducted by UDAF to determine the extent of changes in employees' knowledge and behaviors. The delivery system for the training modules is very innovative.

UDAF is in the process of updating the Wholesome Food Act. The Food Protection Rule is being updated to the 2001 version of the FDA model Food Code. Utah is also participating on a biosecurity alliance.

UDAF strives to continually improve the food program that protects the public.

### Egg & Poultry Grading

The dedicated staff of the Egg and Poultry Section provided 11,250 hours of needed grading service to the consumers of Utah, and the egg and poultry industry in 2002. These grading services are made possible through cooperative agreements with the USDA. We administer this service using licensed department employees, USDA standards, regulations and supervision.

Grading provides a standardized means of describing the marketability of a particular product. Through the application of uniform grade standards, both eggs and poultry can be classified according to a range of quality characteristics. Buyers, sellers and consumers alike can communicate about these characteristics through a common language. The use of the official USDA grade shield certifies that both eggs and poultry have been graded under the continuous inspection of grading personal.

Program activities include:

- Shell Egg Grading
- Egg Products Inspection
- Shell Egg Surveillance
- Poultry Grading

### Shell Egg Grading

The USDA grading of shell eggs allows companies like Wal Mart and Sysco to establish requirements and specifications exclusive to them. This allows these companies to buy eggs nation wide from many suppliers that meet the same standards and quality. In Utah last year 461,869 (30 dozen per case) cases of shell eggs were graded to meet company specifications or

contract requirements. This is about 60 percent of all eggs USDA graded in Utah. The verification of specifications and contract requirements is a big part of the services the USDA licensed egg graders of Utah provide to the egg industry.

The growth in the number of eggs being USDA graded has increased over the past two years by leaps and bounds. There was a 24 percent increase over the previous year.

A total of 769,877 (30 dozen per case) cases where graded by licensed graders in Utah this past year of 2002. Compared to the 588,746 (30 dozen per case) cases graded in 2001.

During 2002, the humane treatment of egg laying hens has received a great deal of attention. As a result, the United Egg Producers developed management practice guidelines to address these issues and concerns. Independent auditors certify that these guidelines are being followed.

### **Egg Products Inspection**

Egg Products are eggs that have the shell removed for processing. Processing includes breaking eggs, filtering, mixing, stabilizing, blending, pasteurizing, cooling, freezing and packaging. The further processing of eggs adds greater product stability, longer shelf life, and ease in preparation and storage, as well as product safety.

The Egg Products Inspection Act provides for the mandatory continuous inspection of the processing of liquid, frozen and dried egg products. Egg products are inspected to ensure that they are wholesome, otherwise not adulterated, properly labeled, and packaged to protect the health and welfare of consumers. Egg Products are used extensively in the food industry in the production of bakery items, pasta products, ice cream, eggnog, etc. and by restaurants and institutions in meals.

During the year 2002, 214,522 (30 dozen per case) cases of shell eggs where processed into liquid or frozen egg products in Utah. This is an increase of about 12% over the previous year.

### **Shell Egg Surveillance**

The Egg Products Inspection Act also requires that all egg producers with over 3,000 layers, firms grading and packing eggs from production sources other than their own, and Hatcheries be registered with the USDA. These firms are visited quarterly to verify that shell eggs packed for the consumer are in compliance, that restricted eggs are being disposed of properly, and that adequate records are being maintained.

### **Poultry Grading**

In the United States 272 million turkeys were raised in 2002. Many of these turkeys were grown in Utah. The turkey growers of Utah produce and process turkey and turkey products, which are distributed to consumers worldwide. Many of these products are graded by Utah licensed Poultry graders. The USDA licensed Poultry graders of Utah graded 88,989,110 lbs. of turkey and turkey products in the year 2002. This is a slight increase over last years 81,279,368 lbs.

### **Meat Compliance**

The goal of the Meat Compliance Program 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.

The planned compliance review program has almost doubled in the number of reviews completed. These reviews evaluate compliance at custom exempt plants, farm custom slaughter facilities, and game processors as well as previous violators of meat and poultry inspection laws and rules. The centralization of the meat packing industry has forced an increase in the number of animals processed by exempt facilities. Two facilities were issued "Warning Notices" for improper documentation and marking of exempt product.

The Meat Compliance Program is committed to serving the ethnic community through increased education concerning the sale and distribution of meat and meat food products. Careful review of business practices have helped us discover problems and make corrections where needed.

During the calendar year 2002, the Meat Compliance Program conducted 1,481 random reviews of state businesses and 889 reviews of restaurants, hotels and other institutions. Planned Compliance Reviews of 76 previous violators of meat laws were conducted showing a high degree of compliance. Compliance investigations resulted in 19 letters of warning being issued. Three civil citations were issued for \$1,100.00 due to illegal slaughter, sale, and distribution of non-inspected meat.

Compliance officers collected more than 500 ground beef samples. The State Chemist tested the samples for fat, sulfites, and added water. The results showed a decline in compliance in 2001 with 18% violations and a further decline in 2002 with 21% violations. We have concentrated on documenting the source of the problem and have addressed it both at the wholesale level as well as the retail level. During 2003, increased emphasis will be given to this matter. The Meat Compliance Program has a growing problem of improper use of retail stores as suppliers of meat to restaurants. An exemption sometimes allows catering businesses to "skirt" meat laws. During 2003, we plan a significant effort to educate and obtain compliance of these types of sales.

### **Dairy Compliance Program**

In 2002 Chris S. Crnich, DVM, was named the new Director for the Division of Regulatory Services. Dr. Crnich brings with him a broad range of experience which qualifies him not only as the leader and administrator of the division, but with his background and history in his large animal practice, he brings with him a knowledge of dairy farming and it's challenges and frustrations, a vision of the level of new heights the dairy industry could attain, and the direction the Utah State Dairy Program can take to not only regulate but partnership with the dairy industry to provide guidance and support.

The word 'challenging' aptly describes the year 2002 for the Utah Dairy Farmer. Class I utilization of milk in Utah was one of the lowest in the United States. At 20% utilization, Utah tied with Wisconsin, Minnesota, and Idaho for the lowest Class I (fluid milk) utilization. The repercussions of this was no more evident than in the mailbox prices, which in Utah, at \$10.74, trailed the rest of nation every single month for the entire 2002 year. The consequence of this severely depressed milk price

also manifested itself in the loss of family farms in Utah as there were 400 dairies operating in Utah in 2001, and 372 operating dairies in 2002, a reduction of twenty eight (28) dairies. Utah Dairy Farmers were not the only producers hit economically, but they were the hardest hit. The entire dairy industry has been challenged this year with prices paid for milk reaching the lowest adjusted price in 50 years. A summary of state and national dairy statistics is listed below.

Total dairy farms in Utah	760
Total milk cows in Utah	93,000
Total milk production in Utah	1.659 billion lbs
Production per cow in Utah	17,581 lbs

**Dairy Compliance Program** – The program seeks voluntary compliance to the Utah Dairy Act and Administrative Rules regulating the state’s dairy industry. When voluntary compliance cannot be achieved, regulatory action is initiated. During the calendar year 2002, there were 2088 inspections conducted; 301 administrative letters written; 35 permits suspended; 1 administrative hearing held; and about one million pounds of adulterated milk and milk products removed from commerce by Utah Dairy Compliance Officers.

TYPE	NUMBERS	INSPECTIONS
Grade A Dairies	336	1,321
Manufacturing Dairies	36	132
Dairy Processors	49	371
Raw to Retail Dairies	3	18
Milk Haulers/Samplers	169	82
Milk Trucks	<u>291</u>	<u>164</u>
Total	884	2,088

#### **Bedding, Upholstered Furniture & Quilted Clothing**

The purpose of the Bedding, Upholstered Furniture and Quilted Clothing Program is to protect consumers against fraud and product misrepresentation, to assure Utahns 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 items for sale within the state. Application forms (printable in Adobe Acrobat), and other program materials are available at the following URL: <http://ag.utah.gov/regsvcs/bedding.html>

Product labels are required to indicate whether the product is made with new or used filling materials and to disclose those materials by name and percentage. This enables consumers to make price/value/performance-based buying decisions. It also encourages fair competition among manufacturers by establishing uniformity in labeling and accurate component disclosure.

Annual license fees fund an inspection program that allows products to be examined and tested to ensure contents are accurately labeled. In 2002, the Department was able to implement on-line license renewal. Hopefully, in the near future, the initial license application process will also be available on-line. This should be especially helpful to foreign manufacturers and create

a more efficient and accurate licensing process. During 2002, 1474 licenses generated \$78,000 in general revenue making the program self-sustaining.

In 1936, state officials responsible for the enforcement of consumer-oriented bedding and furniture laws in their respective states formed the Association of Bedding & Furniture Law Officials (ABFLO). One of the association’s main purposes is to actively promote uniformity among state programs to make it easier for industry to sell products throughout the country. This year, the association changed their name to the International Association of Bedding and Furniture Law Officials (IABFLO). Bedding and furniture regulators throughout the world may join the association and attend the yearly Conference. Professionals from industry may also join the association as Associate Members to have direct input on policies that may effect their industry.

The IABFLO website, [www.abflo.org](http://www.abflo.org), provides useful information about bedding and upholstered furniture programs in various states. It also provides contact information as well as links to many state websites. It’s a great resource for manufacturers and importers trying to sell regulated products in the United States.

#### **Food Labeling**

The State of Utah has adopted labeling regulations as set forth in the Code of Federal Regulations (CFR) and reviews labels to assist manufacturers to comply with these regulations. Label reviews help new producers avoid costly reprinting of incorrect labels and help assure that consumers get complete and accurate information in a uniform format on all food products.

Proper labeling of food ingredients is a vitally important issue to consumers who have food sensitivities or other dietary restrictions. Reports of allergic reactions to incompletely or incorrectly labeled foods continue to increase. Manufacturers are responsible for ensuring that food is not adulterated or misbranded as a result of undeclared allergens. The Food & Drug Administration (FDA) believes the following foods account for more than 90% of all food allergies: legumes (such as peanuts and soybeans), milk, eggs, fish, crustacea, mollusks, tree nuts, and wheat.

The CFR provides that spices, flavors, and certain colors used in foods may be declared collectively without naming each one individually. However, in some instances, these ingredients contain sub-components that are allergens. Evidence indicates that some food allergens can cause serious reactions even when present in very small amounts. Therefore, the presence of an allergen, even as a sub-component of another ingredient, must be listed in the ingredient statement.

FDA continues to focus on accurate labeling as well as other aspects of food safety. Congress stated that improving the health status of US citizens is a national priority. As part of that initiative, FDA is preparing good manufacturing practices (GMPs) for Manufacturing, Packing, or Holding of Dietary Ingredients and Dietary Supplements.

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**

The Weights and Measures Program involves all weights and measures of every kind and any instrument or device used in weighing or measuring application. 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. Unannounced inspections are routinely conducted. Weights and Measures also respond to consumer complaints. These activities are enforced through the Utah Weights and Measures Act and five accompanying administrative rules.

In the year 2002, emphasis was given to consumer protection in the area of price verification, package inspection, liquefied petroleum meters, scale inspections, gasoline pumps and petroleum and water meters.

The Weights & Measures Program operates in the following areas:

#### **General Inspections**

Scales are inspected to insure that they are accurate for the services in which they are used, installed properly, and positioned so that customers can see the display.

Weights and Measures inspectors pump fuel into a certified test measure to check for the accuracy of the amount of product delivered by the dispenser.

Scanner Inspections may be conducted in any type of store. Scanner pricing errors adversely affect retailers and consumers. Retailers lose profits on undercharges and consumers lose money on overcharges. Price Verification inspections ensure that consumers are charged the advertised price for the items they purchase.

Weights and Measures officials check packaged products to be sure they contain the quantity stated on the label. Inspectors take random samples of packages in stores and count the items in the packages. Officials weigh or measure the contents to see if the labeled quantity is accurate.

Our inspectors checked 6,645 small capacity scales (0 – 999lbs.) and 13,393 gasoline pumps. Every type of item is subject to either a scanning inspection, package checking, or label review. In 2002, there were 655 package check inspections that consisted of 10,480 packages. Package inspections verify the net quantity statement. In 2002, 328 scanner inspections were conducted verifying prices on 24,540 items.

#### **Large Capacity Scales**

Large-scale capacities include 1,000 lbs. and up. These devices may include scales used for weighing livestock, coal, gravel, vehicles, etc., within inspections conducted at auction yards, ranches, ports of entry, mine sites, construction sites, gravel pits and railroad yards, etc. A total of 1,564 large capacity scale inspections were conducted in 2002.

#### **Liquefied Petroleum Gas Meters**

Weights and measures LPG inspectors provide inspections to all Utah Vendors dispensing LPG either through dispensers or delivery trucks. In 2002, there were 354 propane meters inspected throughout the state. These inspections included checking

appropriate installation and calibration of propane dispensers and meters.

#### **Large Capacity Petroleum & Water Meters**

Inspections are conducted on airport fuel trucks, fuel delivery trucks, cement batch plant water meters and other large meters. There were 250 inspections conducted in 2002.

#### **Metrology Laboratory**

The Metrology Laboratory is operated and maintained by one person. The state maintains standards of mass, length, and volume. In the year 2002, 547 artifacts from industry and 211 artifacts from the Utah Weights and Measures Program were tested for a certificate of calibration certificate. These include calibration services in mass, length, and volume, using standards that are traceable to the National Institute of Standards and Technology.

In December 2002, Richard Atkinson started as our new Metrologist. Richard brings a wealth of knowledge to the program and has a background in quality assurance. We look forward to having Richard as our new Metrologist for the Weights and Measures Program.

Consumers rely on the services of this facility to certify equipment used for weight, length or volumetric measurement in commercial business.

#### **Motor Fuel Laboratory**

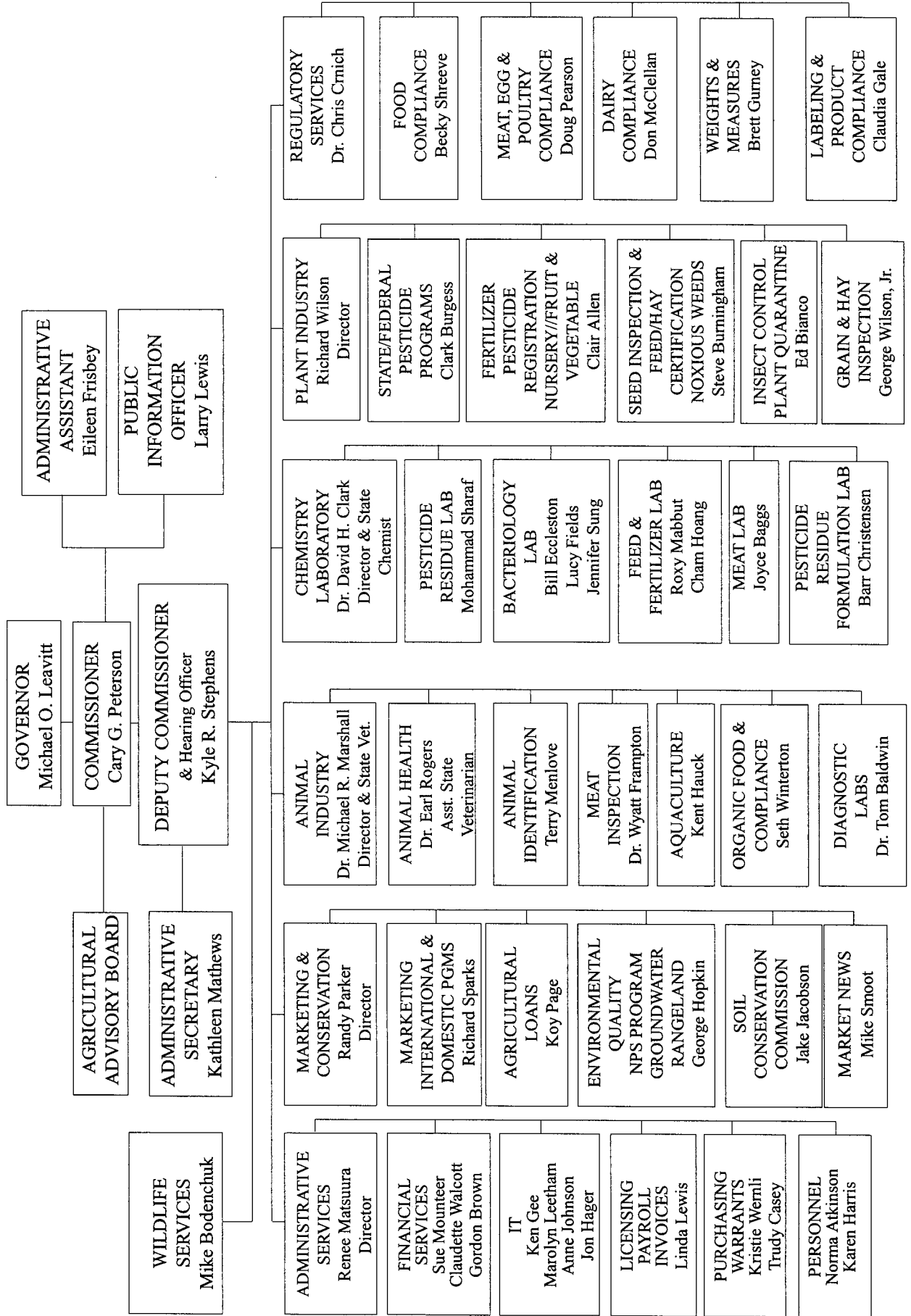
The Motor Fuel Laboratory maintains a high standard of testing for motor fuel quality. For the year 2002, 40 complaint cases required investigation and validation of claims. Of the 40 cases, 38 were determined to be valid requiring further investigation. 14 of the cases that were investigated resulted in helping consumers recoup monetary losses of approximately \$8,900. This money was recovered from major fuel companies and insurances. The compensation was for repairs performed on vehicles with fuel related damage that had been properly and accurately diagnosed by professional mechanics. After the diagnosis by the professional mechanics, Utah Motor Fuel Testing Laboratory also verified the validity of the claims.

The lab unofficially participated in a round robin knock engine test and matched the results achieved by two local refineries. After numerous consumer complaints in the southwest corner of the state concerning octane ratings on gasoline dispensers an investigation was conducted and found a high percentage of noncompliance. Subsequent warning letters and recommendations of octane posting were sent out. Follow-up inspections have indicated that stations are becoming compliant.

An e-mail group describing complaint issues and problems was started. Issues describing problems encountered by our investigations are shared with fuel wholesalers and retailers so as to facilitate avoiding the same problems with consumers and their respective areas.

As population and industry growth continues, so does the need to provide weights and measures inspection services.

UTAH DEPARTMENT OF AGRICULTURE AND FOOD  
ORGANIZATIONAL CHART



# UTAH AGRICULTURAL STATISTICS - 2003



## Ranking: Top Five States, Utah's Rank, and United States Total, by Agricultural

Top Five States					Utah's Rank	United States Total
First	Second	Third	Fourth	Fifth		
<b>GENERAL</b>						
<b>Number of Farms &amp; Ranches, 2002</b>						
TX	MO	IA	TN	KY	35	
230,000	107,000	92,500	90,000	89,000	15,000	2,158,090
<b>Land in Farms &amp; Ranches, 2002 (1,000 Acres)</b>						
TX	MT	KS	NE	NM	26	
131,000	56,700	47,400	46,400	44,000	11,600	941,480
<b>Cash Receipts from Farm Marketings, 2001 (1,000 Dollars) <sup>1</sup></b>						
CA	TX	IA	NE	KS	37	
25,509,829	13,343,556	10,774,252	8,951,881	7,905,407	1,010,202	193,585,849
<b>FIELD CROPS</b>						
<b>Harvested Acreage Principal Crops, 2002 (1,000) <sup>2</sup></b>						
IA	IL	KS	ND	MN	36	
24,331	23,175	20,000	20,000	19,000	951	299,855
<b>Corn for Grain Production, 2002 (1,000 Bushels)</b>						
IA	IL	MN	NE	IN	40	
1,963,500	1,496,000	1,105,900	940,800	631,620	2,030	9,007,659
<b>Corn for Silage Production, 2002 (1,000 Tons)</b>						
WI	CA	MN	NY	PA	28	
11,680	10,140	7,650	7,540	6,440	800	104,979
<b>Barley Production, 2002 (1,000 Bushels)</b>						
ND	ID	MT	WA	CO	14	
57,040	53,960	39,900	18,360	7,200	2,880	226,873
<b>Oats Production, 2002 (1,000 Bushels)</b>						
MN	WI	IA	ND	TX	28	
15,960	15,000	13,300	12,760	7,040	450	119,132
<b>All Wheat Production, 2002 (1,000 Bushels)</b>						
KS	ND	WA	MT	OK	33	
267,300	216,610	129,695	109,895	98,000	4,892	1,616,441
<b>Other Spring Wheat Production, 2002 (1,000 Bushels)</b>						
ND	MT	MN	ID	WA	9	
165,200	75,900	61,200	33,150	26,445	517	394,189
<b>Winter Wheat Production, 2002 (1,000 Bushels)</b>						
KS	WA	OK	TX	ID	30	
267,300	103,250	98,000	78,300	54,510	4,375	1,142,802
<b>All Hay Production, 2002 (1,000 Tons)</b>						
TX	CA	MO	KS	SD	25	
13,850	9,594	7,840	6,965	4,800	2,286	150,962
<b>Alfalfa Hay Production, 2002 (1,000 Tons)</b>						
CA	MN	ID	IA	WI	14	
8,094	5,280	5,000	4,875	4,620	2,016	73,824
<b>All Dry Edible Beans Production, 2002 (1,000 Cwt)</b>						
ND	MI	NE	MN	ID	18	
10,626	4,903	3,465	2,475	1,907	5	29,974
<b>All Potato Production, 2002 (1,000 Cwt)</b>						
ID	WA	WI	CO	ND	33	
133,385	95,200	31,125	30,189	23,460	244	463,214

<sup>1</sup> In accordance with USDA, ERS Ranking of States and Commodities by Cash Receipts. <sup>2</sup> 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: Top Five States, Utah's Rank, and United States Total by Agricultural

Top Five States					Utah's Rank	United States Total
First	Second	Third	Fourth	Fifth		
<b>Fruits &amp; Vegetables</b>						
<b>Apple Utilized Production, All Commercial, 2002 (Million Pounds)</b>						
WA	NY	MI	CA	PA	28	8,405
5,150	630	495	460	369	6.5	
<b>Apricot Utilized Production, 2002 (Tons)</b>						
CA	WA	UT			3	80,030
75,000	4,900	130			130	
<b>Peach Utilized Production, 2002 (Million Pounds)</b>						
CA <sup>1</sup>	SC	GA	WA	PA	20	2,472.5
1,870	130	92	66	59	6.5	
<b>Pear Utilized Production, 2002 (Tons)</b>						
WA	CA	OR	NY	PA	9	867,000
389,000	262,000	198,000	9,850	3,500	350	
<b>Sweet Cherry Utilized Production, 2002 (Tons)</b>						
WA	CA	OR	MI	MT	7	177,165
870,000	53,700	29,000	2,600	2,080	380	
<b>Tart Cherry Utilized Production, 2002 (Million Pounds)</b>						
WA	MI	NY	WI	PA	7	62.2
20.5	15	12.7	4	3.8	2.8	
<b>Onion Production, Summer Storage, 2002 (1,000 Cwt)<sup>2</sup></b>						
CA <u>2</u>	OR	WA	ID	CO	7	46,898
12,312	10,662	8,960	5,056	4,400	1050	
<b>Livestock, Mink, &amp; Poultry</b>						
<b>All Cattle &amp; Calves, January 1, 2003 (1,000 Head)</b>						
TX	KS	NE	OK	CA	33	96,106
14,000	6,350	6,200	5,400	5,250	880	
<b>Beef Cows, January 1, 2003 (1,000 Head)</b>						
TX	MO	OK	NE	SD	28	32,946.9
5,489	2,116	2,042	1,934	1,686	339	
<b>Breeding Hogs, December 1, 2002 (1,000 Head)</b>						
IA	NC	MN	IL	MO	16	6,012
1,050	1,000	580	430	365	90	
<b>Honey Production, 2002 (1,000 Lbs)</b>						
ND	CA	FL	SD	MN	23	171,140
24,000	23,320	20,460	11,475	8,541	1298	
<b>Mink Pelt Production, 2002 (Pelts)</b>						
WI	UT	OR	MN	ID	2	2,600,400
685,000	575,000	270,200	567,000	228,900	575,000	
<b>All Sheep, January 1, 2002 (1,000 Head)</b>						
TX	CA	WY	SD	CO	6	6,350
1,050	790	460	380	370	320	
<b>Chickens, Layers Inventory, December 1, 2002 (1,000)</b>						
IA	OH	PA	IN	CA	27	337,213
37,749	30,995	24,180	23,018	22,542	3,352	
<b>Milk Cow Inventory, January 1, 2003 (1,000 Head)</b>						
CA	WI	NY	PA	MN	25	9,151.7
1,680	1,265	680	590	480	91	
<b>Trout Sold, 2002 (Value 000)</b>						
ID	NC	WA	CA	PA	10	69,597
30,456	6,829	5,385	5,091	4,562	1,081	

<sup>1</sup> freestone    <sup>2</sup> Includes fresh and processing onions.

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

	Quantity Unit	Record High		Record Low		Year Record Started
		Quantity	Year	Quantity	Year	
<b>Corn for Grain</b>						
Acres Harvested	1,000 Acres	24	1918,1992,1998	2	1963,1966	1882
Yield	Bushels	147.0	1997	14.7	1889	
Production	1,000 Bushels	3,384	1998	85	1934	
<b>Corn for Silage</b>						
Acres Harvested	1,000 Acres	80	1975,1976	2	1920,1921,1922	1919
Yield	Tons	23.0	1997	6.0	1934	
Production	1,000 Tons	1,501	1980	17	1921	
<b>Barley</b>						
Acres Harvested	1,000 Acres	190	1957	8	1898	1882
Yield	Bushels	88.0	1995	22.0	1882	
Production	1,000 Bushels	12,880	1982	242	1882	
<b>Oats</b>						
Acres Harvested	1,000 Acres	82	1910	5	2002	1882
Yield	Bushels	90.0	2002	25.0	1882,1883	
Production	1,000 Bushels	3,338	1914	390	2001	
<b>All Wheat</b>						
Acres Harvested	1,000 Acres	444	1953	65	1880,1881	1879
Yield	Bushels	52.6	1999	15.4	1919	
Production	1,000 Bushels	9,750	1986	1,139	1882	
<b>Other Spring Wheat</b>						
Acres Harvested	1,000 Acres	160	1918	11	2002	1909
Yield	Bushels	65.0	1995	18.7	1919	
Production	1,000 Bushels	4,000	1918	517	2002	
<b>Winter Wheat</b>						
Acres Harvested	1,000 Acres	342	1953	120	1909	1909
Yield	Bushels	52.0	1999	12.7	1919	
Production	1,000 Bushels	8,100	1986	1,862	1924	
<b>All Hay</b>						
Acres Harvested	1,000 Acres	715	1997	402	1909	1909
Yield	Tons	3.92	1999	1.51	1934	
Production	1,000 Tons	2,778	1998	679	1934	
<b>Alfalfa Hay</b>						
Acres Harvested	1,000 Acres	562	1930	359	1934	1919
Yield	Tons	4.40	1993,1998,1999	1.67	1934	
Production	1,000 Tons	2,398	1998	600	1934	
<b>All Other Hay</b>						
Acres Harvested	1,000 Acres	180	1947	92	1934	1924
Yield	Tons	2.30	1998,1999	0.86	1934	
Production	1,000 Tons	380	1998	79	1934	
<b>Dry Edible Beans</b>						
Acres Harvested	1,000 Acres	20	1970	0	2002	1934
Yield	Pounds	1,670	2002	110	1951	
Production	1,000 Cwt	91	1947	2	1977	
<b>Fall Potatoes</b>						
Acres Harvested	1,000 Acres	19.6	1943	0.8	2002	1882
Yield	Cwt	305	2002	45	1886	
Production	1,000 Cwt	2,153	1946	244	2002	
<b>Summer Storage Onions</b>						
Acres Harvested	Acres	2,700	1999	550	1954,1966	1939
Yield	Cwt	525	1992	200	1940	
Production	1,000 Cwt	1,256	1999	150	1952	
<b>Apples</b>						
Utilized Production	Million Lbs	63.0	1987	2.7	1889	1889
<b>Apricots</b>						
Utilized Production	Tons	10,000	1957	0	1972,1995,1999	1929
<b>Peaches (Freestone)</b>						
Utilized Production	Million Lbs	44.2	1922	1.5	1972	1899
<b>Pears</b>						
Utilized Production	Tons	8,750	1954	200	1972	1909
<b>Sweet Cherries</b>						
Utilized Production	Tons	7,700	1968	0	1972	1938
<b>Tart Cherries</b>						
Utilized Production	Million Lbs	30.0	1992	1.3	1972	1938

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

	Quantity Unit	Record High		Record Low		Year Record Started
		Quantity	Year	Quantity	Year	
<b>Cattle &amp; Calves</b>						
Inventory Jan 1 . . . . .	Thou Hd	950	1983	95	1867	1867
Calf Crop . . . . .	Thou Hd	400	2000,2001	129	1935	1920
Beef Cows Jan 1 <sup>1</sup> . . . . .	Thou Hd	374	1983	107	1939	1920
Milk Cows Jan 1 <sup>1</sup> . . . . .	Thou Hd	126	1945	14	1867	1867
Milk Production . . . . .	Mill. Lbs	1,687	2000	412	1924	1924
Cattle on Feed Jan 1 . . . . .	Thou Hd	81	1966	25	2002	1959
<b>Hogs and Pigs</b>						
Inventory Dec. 1 <sup>2</sup> . . . . .	Thou Hd	610	2001	4	1866,1867,1868	1866
<b>Sheep and Lambs</b>						
Breeding Sheep Inventory Jan 1 . . .	Thou Hd	2,775	1931	167	1867	1867
Lamb Crop . . . . .	Thou Hd	1,736	1930	305	2001,2002	1924
Market Sheep & Lambs Inv Jan 1 . . .	Thou Hd	295	1937	18	1988	1937
<b>Chickens</b>						
Hens & Pullets of Laying Age Dec 1	Thou Hd	3,512	2001	1,166	1965	1925
Egg Production Total for Year . . .	Mill. Eggs	894	2002	142	1924	1924
<b>Honey</b>						
Production . . . . .	Thou Lbs	4,368	1963	874	2001	1913
<b>Mink</b>						
Pelts Produced . . . . .	Thou Pelts	780	1989	283	1973	1969

<sup>1</sup> Cows and heifers two years old and over prior to 1970; cows that have calved starting in 1970.

<sup>2</sup> January 1 estimates discontinued in 1969. December 1 estimates began in 1969.

# Farms and Land in Farms

## Farm Numbers and Acreage: Utah and United States, 1991-2002 <sup>1</sup>

Year	Utah			United States		
	Farms <sup>2</sup>	Land in Farms		Farms <sup>2</sup>	Land in Farms	
		Average Size	Total		Average Size	Total
	<i>Number</i>	<i>Acres</i>	<i>1,000 Acres</i>	<i>Number</i>	<i>Acres</i>	<i>1,000 Acres</i>
1991	13,300		11,300	2,116,760	464	981,736
1992	13,200		11,300	2,107,840	464	978,503
1993	14,500	772	11,200	2,201,590	440	968,845
1994	14,500	772	11,200	2,197,690	440	965,935
1995	15,000	760	11,400	2,196,400	438	962,515
1996	15,000	760	11,400	2,190,500	438	958,675
1997	15,000	773	11,600	2,190,510	436	956,010
1998	15,000	773	11,600	2,191,360	435	953,500
1999	15,500	748	11,600	2,192,070	432	947,440
2000	15,500	748	11,600	2,172,080	434	943,090
2001	15,000	773	11,600	2,155,680	437	941,310
2002	15,000	773	11,600	2,158,090	436	941,480

<sup>1</sup> A farm is defined as a place with annual sales of agricultural products of \$1,000 or more.

<sup>2</sup> 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. All definition changes beginning in 1995 were carried back to 1993.

## Number of Farms and Land in Farms: Economic Sales Class, Utah, 2000-2002

Year	Number of Farms				Land in Farms			
	Economic Sales Class				Economic Sales Class			
	\$1000-\$9,999	\$10,000-\$99,999	\$100,000 & Over	Total	\$1,000-\$9,999	\$10,000-\$99,999	\$100,000 & Over	Total
<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	<i>1,000 acres</i>	
2000	9,000	5,000	1,500	15,500	1,100	2,800	7,700	11,600
2001	8,500	5,000	1,500	15,000	1,100	2,500	8,000	11,600
2002	8,300	5,000	1,700	15,000	1,000	2,300	8,300	11,600



# Farm Income

## Cash Receipts: by Commodity, Utah, 1999-2002 <sup>1 2</sup>

Commodity	1999		2000		2001		2002 <sup>3</sup>	
	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total	Dollars	% of Total
	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>Percent</i>
<b>All Commodities</b>								
All Commodities	955,802	100.0	1,020,186	100.0	1,115,082	100.0	1,055,572	100.0
<b>Livestock &amp; Products</b>								
Livestock & products	712,691	74.6	773,530	75.8	855,081	76.7	807,752	76.5
Meat Animals	386,722	40.5	470,261	46.1	497,141	44.6	479,961	45.5
Cattle & Calves	314,162	32.9	350,945	34.4	374,459	33.6	356,693	33.8
Hogs	54,136	5.7	98,042	9.6	107,488	9.6	105,450	10.0
Sheep & Lambs	18,424	1.9	21,274	2.1	15,194	1.4	17,818	1.7
Dairy Products	222,122	23.2	186,032	18.2	236,670	21.2	193,402	18.3
Milk, Retail								
Milk, Wholesale	222,122	23.2	186,032	18.2	236,670	21.2	193,402	18.3
Poultry/Eggs	73,856	7.7	82,878	8.1	88,711	8.0	102,794	9.7
Farm chickens	147		87		105		78	
Chicken Eggs	19,234	2.0	25,751	2.5	31,717	2.8	31,290	3.0
Other Poultry	7,549	0.8	7,549	0.7	6,054	0.5	6,124	0.6
Miscellaneous Livestock	29,991	3.1	34,359	3.4	32,559	2.9	31,595	3.0
Honey	796	0.1	590	0.1	568	0.1	1,674	0.2
Wool	963	0.1	673	0.1	812	0.1	1,590	0.2
Trout	1,697	0.2	1,396	0.1	1,324	0.1	1,081	0.1
Other Livestock	26,535	2.8	31,700	3.1	29,855	2.7	27,250	2.6
Mink pelts	16,740	1.8	21,905	2.1	20,060	1.8	20,435	1.9
All other livestock	9,795	1.0	9,795	1.0	9,795	0.9	6,815	0.6
<b>Crops</b>								
Crops	243,111	25.4	246,656	24.2	260,002	23.3	247,821	23.5
Food Grains	21,797	2.3	18,976	1.9	17,678	1.6	17,877	1.7
Wheat	21,797	2.3	18,976	1.9	17,678	1.6	17,877	1.7
Feed Crops	117,568	12.3	121,002	11.9	140,517	12.6	129,607	12.3
Barley	11,771	1.2	9,359	0.9	9,584	0.9	7,794	0.7
Corn	5,567	0.6	4,966	0.5	4,208	0.4	3,880	0.4
Hay	99,704	10.4	106,074	10.4	126,220	11.3	117,460	11.1
Oats	526	0.1	603	0.1	506		473	
Oil Crops	1,768	0.2	1,582	0.2	1,188	0.1	1,158	0.1
Vegetables	20,165	2.1	22,111	2.2	22,809	2.0	22,395	2.1
Beans, dry	798	0.1	493		352		262	
Potatoes, fall	2,525	0.3	2,072	0.2	2,130	0.2	2,359	0.2
Onions, storage	6,642	0.7	9,346	0.9	10,127	0.9	9,573	0.9
Miscellaneous Vegetables	10,200	1.1	10,200	1.0	10,200	0.9	10,200	1.0
Fruits/Nuts	9,312	1.0	16,458	1.6	10,667	1.0	6,669	0.6
Apples	2,154	0.2	3,541	0.3	4,496	0.4	2,480	0.2
Fresh	2,104	0.2	3,256	0.3	4,350	0.4	2,425	0.2
Processing	50		285		146		55	
Apricots			159		196		92	
Cherries	3,846	0.4	8,370	0.8	3,021	0.3	1,258	0.1
Sweet	1,149	0.1	2,430	0.2	514		586	0.1
Tart	2,697	0.3	5,940	0.6	2,507	0.2	672	0.1
Peaches	2,034	0.2	3,000	0.3	1,936	0.2	2,031	0.2
Pears, Bartlett	135		245		175		225	
Other berries	693	0.1	693	0.1	513		313	
Miscellaneous Fruits/Nuts	450		450		330		270	
All Other Crops	72,502	7.6	66,527	6.5	67,143	6.0	70,115	6.6
Other Seeds	2,910	0.3	2,910	0.3	2,610	0.2	3,210	0.3
Other Field Crops	714	0.1	714	0.1	714	0.1	739	0.1
Greenhouse/Nursery	63,648	6.7	58,413	5.7	60,044	5.4	62,406	5.9
Christmas Trees	440		440		440		440	
Floriculture	38,708	4.0	34,973	3.4	35,604	3.2	38,966	3.7
Other Greenhouses	24,500	2.6	23,000	2.3	24,000	2.2	23,000	2.2

<sup>1</sup> Source: Economic Research Service, USDA.

<sup>2</sup> USDA estimates and publishes individual cash receipt values only for major commodities and major producing States. The U.S. receipts for individual commodities, computed as the sum of the reported States, may understate the value of sales for some commodities, with the balance included in the appropriate category labeled "other or "miscellaneous." The degree of underestimation in some of the minor commodities can be substantial.

<sup>3</sup> Preliminary.

**Net Farm Income: Value added to the U.S. economy by the agricultural sector via the production of goods and services, Utah, 1995-2001** <sup>1 2 3</sup>

Item	1996	1997	1998	1999	2000	2001	2002
	Thousand Dollars						
<b>Value of Crop Production</b>	243,536	272,375	262,461	243,610	234,313	256,426	238,873
Food Grains	37,343	30,213	24,987	21,797	18976	17,678	17,877
Feed Crops	108,425	136,794	125,727	117,568	121002	141,263	133,430
Oil Crops	1,224	1,528	1,753	1,768	1582	1,188	1,400
Fruits and tree nuts	15,166	13,200	13,718	9,312	16462	10,671	6,826
Vegetables	22,267	24,413	24,522	19,821	22310	19,492	19,778
All other crops	60,379	63,971	66,886	72,502	66527	67,143	70,115
Home consumption	901	901	901	931	901	872	901
Value of inventory adjustment <sup>3</sup>	(2,169)	1,355	3,829	(89)	(13447)	(1,881)	(11,454)
<b>Value of Livestock Production</b>	647,512	705,400	712,061	742,205	784011	873,392	784,818
Meat animals	286,081	384,376	373,166	386,722	470261	497,141	479,961
Dairy products	219,476	195,825	231,154	222,122	186032	236,670	193,402
Poultry and eggs	72,630	73,786	70,645	73,856	82878	88,711	102,794
Miscellaneous livestock	45,498	38,205	38,932	29,991	34359	32,559	31,595
Home consumption	6,157	7,033	6,611	6,917	7526	7,872	7,310
Value of inventory adjustment <sup>3</sup>	17,670	6,175	(8,447)	22,597	2955	10,439	(30,244)
<b>Revenues from Services and Forestry</b>	157,041	151,011	178,983	189,378	181309	194,999	226,154
Machine hire and custom work	12,665	13,723	18,323	11,186	10556	13,656	14,927
Forest products sold	94	95	97	97	97	97	97
Other farm income	33,934	28,316	46,998	62,770	43708	47,710	80,271
Gross imputed rental value of farm dwelling	110,348	108,877	113,565	115,325	126948	133,536	130,859
<b>Value of Agricultural Sector Production</b>	1,048,089	1,128,786	1,153,505	1,175,193	1199634	1,324,817	1,249,844
<b>Purchased Inputs</b>	542,315	591,560	571,942	574,571	628128	610,903	626,840
Farm origin	222,919	255,324	236,154	246,395	259143	256,474	261,124
Feed purchased	148,067	170,876	155,862	149,407	165233	154,754	172,034
Livestock and poultry purchased	56,976	63,858	60,815	75,563	72764	81,130	66,274
Seed purchased	17,876	20,590	19,477	21,425	21146	20,590	22,816
Manufactured inputs	91,326	88,808	85,773	85,492	98582	92,425	90,145
Fertilizers and lime	21,077	23,436	23,038	22,681	21618	19,754	19,418
Pesticides	9,535	10,330	10,822	10,207	10576	10,084	10,084
Petroleum fuel and oils	36,637	38,459	34,599	35,066	49486	43,858	41,085
Electricity	24,077	16,583	17,314	17,538	16902	18,729	19,558
Other Purchased Inputs	228,070	247,428	250,015	242,684	270403	262,004	275,571
Repair and maintenance of capital items	76,518	72,864	76,534	80,451	84216	78,544	79,918
Machine hire and custom work	10,929	12,074	14,196	13,918	14552	14,116	11,955
Marketing, storage, and transportation	23,351	35,378	32,109	29,715	34472	28,542	33,982
Contract labor	6,750	7,264	6,573	6,652	8576	6,921	6,465
Miscellaneous expenses	110,522	119,848	120,603	111,948	128587	133,881	143,251
<b>Net Government Transactions</b>	(4,746)	(5,943)	(1,574)	4,971	8623	13,291	19,849
+ Direct Government payments	21,478	20,094	25,149	30,521	36181	39,754	45,719
- Motor vehicle registration and licensing fee	4,619	4,847	5,573	4,673	6201	5,586	4,273
- Property taxes	21,605	21,190	21,150	20,877	21357	20,877	21,597
<b>Gross Value Added</b>	501,028	531,283	579,989	605,594	580129	727,205	642,853
Capital consumption	133,707	140,092	143,023	148,554	153018	156,523	161,670
Payments to Stakeholders	149,176	162,200	165,337	170,666	183890	182,331	190,673
Employee compensation (total hired labor)	85,188	93,213	94,260	96,749	105557	106,113	110,062
Net rent received by non-operator landlord	10,795	15,032	16,076	17,883	18571	19,613	18,407
Real estate and non-real estate interest	53,193	53,955	55,001	56,034	59762	56,605	62,204
<b>Net Farm Income</b>	218,145	228,991	271,629	286,374	243221	388,351	290,510

<sup>1</sup> Source: Economic Research Service, USDA. <sup>2</sup> Value of agricultural sector production 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, regardless of ownership. Net farm income is the farm operators' 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. <sup>3</sup> 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.

## Farm Balance Sheet: (Excluding Operator Households), Utah, December 31, 1993-2001<sup>1</sup>

Item	1993	1994	1995	1996	1997	1998	1999	2000	2001
<b>Farms (numbers)</b>									
Farms .....	14,500	14,500	15,000	15,000	15,000	15,000	15,500	15,500	15,000
<b>Assets (\$1,000)</b>									
Total Farm Assets .....	7,933,910	8,145,832	8,622,268	9,195,543	9,618,387	10,100,885	10,722,274	1,514,998	12,194,967
Real Estate .....	6,706,488	6,956,268	7,250,194	7,776,169	8,045,344	8,523,877	9,061,500	9,816,625	10,571,750
Livestock & Poultry <sup>2</sup> .....	626,929	626,445	510,964	553,353	625,347	586,854	684,278	745,250	684,278
Machinery & motor vehicles <sup>3</sup> ...	457,446	465,707	486,710	490,496	543,266	549,921	556,483	576,834	565,473
Crops <sup>4</sup> .....	117,657	114,672	101,191	120,993	150,944	147,722	125,968	127,286	123,908
Purchased Inputs <sup>5</sup> .....	25,101	23,632	14,381	18,604	2720,901	21,481	17,170	27,881	17,967
Financial .....	289	(40,892)	258,828	235,928	232,585	271,030	263,875	228,122	231,591
<b>Claims (\$1,000)</b>									
Farm Debt <sup>6</sup> .....	650,400	668,573	688,266	709,522	766,897	786,619	787,132	884,812	926,498
Real estate .....	340,390	339,394	348,133	350,892	372,674	375,675	376,066	458,745	484,725
Farm Credit System .....	102,769	92,910	98,112	98,185	107,940	106,827	102,518	186,516	206,603
Farm Service Agency <sup>7</sup> .....	47,492	45,366	42,569	39,730	37,849	37,182	35,073	33,471	32,909
Commercial banks .....	42,121	43,648	46,160	48,792	52,908	56,951	62,466	67,041	70,102
Life insurance companies .....	8,431	11,041	10,948	9,928	15,802	18,107	19,402	17,526	17,787
Individuals and others .....	139,576	146,428	150,343	154,258	158,174	156,607	156,607	154,191	157,325
CCC storage & drying loans ...	0	0	0	0	0	0	0	0	0
Non-Real Estate .....	310,010	329,179	340,133	358,630	394,223	410,944	411,066	428,067	441,773
Farm Credit System .....	58,471	55,570	56,527	69,904	81,859	87,485	84,879	87,091	99,597
Farm Service Agency <sup>7</sup> .....	35,966	36,867	35,039	36,513	38,728	41,155	44,554	43,104	43,424
Commercial banks .....	150,433	167,111	174,443	172,247	187,382	192,456	188,641	200,230	199,470
Individuals and others .....	65,140	69,632	74,124	79,965	86,254	89,848	92,992	97,642	99,282
<b>Equity (\$1,000)</b>									
Equity .....	7,283,510	7,477,259	7,934,002	8,486,021	8,851,490	9,314,266	9,935,142	10,628,186	11,268,469
<b>Ratios (percent)</b>									
Debt/Equity .....	8.9	8.9	8.7	8.4	8.7	8.5	7.9	8.3	8.2
Debt/Assets .....	8.2	8.2	8.0	7.7	8.0	7.8	7.3	7.7	7.6

<sup>1</sup> Source: Economic Research Service, USDA.

<sup>2</sup> Excludes horses, mules, and broilers.

<sup>3</sup> Includes only farm share value for trucks and autos.

<sup>4</sup> All non-CCC crops held on farms plus the value above loan rate for crops held under CCC.

<sup>5</sup> Data for the value of purchased inputs are unavailable before 1984.

<sup>6</sup> Excludes debt for nonfarm purposes.

<sup>7</sup> Farmers Home Administration prior to 1994.

# Crop Summary - 2002

**2002 Crop Summary:** Utah again suffered through a drought in 2002, marking the fourth consecutive year the state has been plagued by a lack of water. Winter snowpack levels were down compared to normal amounts. Precipitation levels were between 40%-90% of normal by the end of February.

Spring field activities progressed on normal schedules. However, in anticipation of the drought, plantings of barley, spring wheat, corn, and dry beans were down from 2001. Late spring frosts in May and June damaged emerging grains and alfalfa hay crops. In some areas, alfalfa hay was so damaged that farmers cut early in order to clear the field and get the second crop growing. The frost also hit fruit trees during bloom season and caused heavy damage to a large portion of the fruit crop. Poor water supplies caused many farmers to harvest small grains and corn for hay or silage instead of for grain or seed.

July and August were generally hot and dry. Topsoil and subsoil moisture conditions which were not good entering summer rapidly deteriorated. By the end of August, 85% of topsoil moisture and 80% of subsoil moisture was in short to very short supply. Irrigation and stock water supplies were similarly depleted. By the end of August, 84% of irrigation water and 85% of stock water supplies were in short to very short supply.

Small grain harvests kept to historical schedules, beginning around the third week of July and continuing into the first week of September. Corn growth and maturity stages progressed at normal rates through the summer. The first three cuttings of alfalfa hay also proceeded on a normal time line. However, fourth cutting of alfalfa was slightly behind schedule, in part due to fall rains that slowed harvest. Yields for alfalfa hay, barley, spring wheat, and winter wheat were below 2001 yields.

Fall brought cooler temperatures and much needed rain. Fall plantings of winter wheat began the second week of September and continued to the end of October. Corn for silage harvest was completed on schedule while corn for grain harvest was about a week behind schedule as fall rains slowed the beginning of harvest.

## Crop Production Index (1977=100):Crops, by Commodity Grouping Utah, 1995-2002

Year	Small Grain <i>Percent</i>	Hay <i>Percent</i>	Fruit <sup>1</sup> <i>Percent</i>	Other Crops <i>Percent</i>	Total Crops <i>Percent</i>
1995	136	144	76	105	131
1996	125	137	110	106	128
1997	136	148	81	116	136
1998	130	151	122	105	138
1999	129	149	48	108	131
2000	101	136	127	105	125
2001	86	138	60	96	117
2002	65	124	20	87	101

<sup>1</sup> Fruit production index is derived from total production.

# Field Crops

## Hay: Acreage, Yield, Production, and Value, Utah, 1995-2002

Year	Acres Harvested	Yield per Acre	Production	Marketing Year Average Price <sup>1</sup>	Value of Production
	<i>1,000 Acres</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>Dollars per Ton</i>	<i>1,000 Dollars</i>
<b>Alfalfa &amp; Alfalfa Mixtures</b>					
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	85.00	199,240
1998	545	4.40	2,398	77.00	184,646
1999	540	4.40	2,376	73.00	173,448
2000	550	4.00	2,200	79.50	174,900
2001	550	4.00	2,200	97.00	213,400
2002	560	3.60	2,016	97.50	196,560
<b>All Other Hay</b>					
1995	150	2.00	300	49.50	14,850
1996	160	2.10	336	46.50	15,624
1997	170	2.20	374	64.00	23,936
1998	165	2.30	380	51.50	19,570
1999	160	2.30	368	37.50	13,800
2000	150	2.00	300	52.00	15,600
2001	160	2.10	336	57.00	19,152
2002	150	1.80	270	57.50	15,525
<b>All Hay</b>					
1995	695	3.80	2,644	66.00	169,554
1996	705	3.57	2,516	72.00	173,674
1997	715	3.80	2,718	84.00	223,176
1998	710	3.91	2,778	76.00	204,216
1999	700	3.92	2,744	71.50	187,248
2000	700	3.57	2,500	78.50	190,500
2001	710	3.57	2,536	95.00	232,552
2002	710	3.22	2,286	95.50	212,085

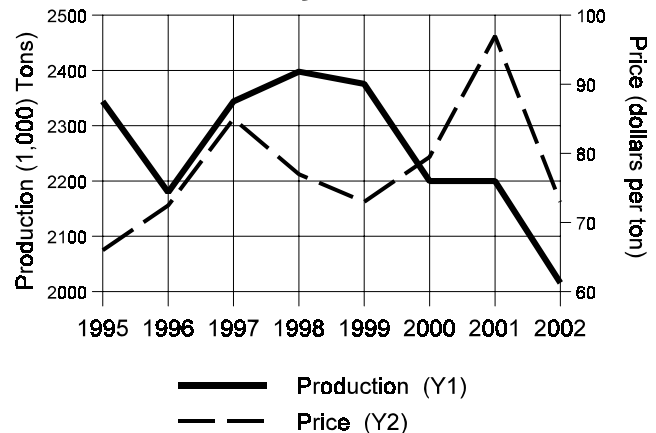
<sup>1</sup> Baled hay.

### Hay: Stocks on Farms, May 1 and December 1, Utah, 1995-2003

Year	May 1	December 1
	<i>1,000 Tons</i>	<i>1,000 Tons</i>
1995	245	1,481
1996	349	1,327
1997	302	1,658
1998	435	1,695
1999	485	1,540
2000	320	1,150
2001	200	1,470
2002	210	1,200
2003	175	( <sup>1</sup> )

<sup>1</sup> Available January 2004

### Utah Alfalfa Hay Production & Price



## Small Grains: Acreage, Yield, Production, and Value, Utah, 1995-2002

Crop & Year	Acres		Yield per acre	Production	Price per Bushel	Value of Production
	Planted <sup>1</sup>	Harvested				
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>Dollars per Bushel</i>	<i>1,000 Dollars</i>
<b>Winter Wheat</b>						
1995	150	145	48.0	6,960	4.75	33,060
1996	175	160	38.0	6,080	4.45	27,056
1997	170	165	46.0	7,590	3.29	24,971
1998	155	150	50.0	7,500	2.95	22,125
1999	150	145	52.0	7,540	2.60	19,604
2000	150	145	40.0	5,800	3.25	18,850
2001	140	125	42.0	5,250	3.30	17,325
2002	140	125	35.0	4,375	4.70	20,563
<b>Other Spring Wheat</b>						
1995	27	25	65.0	1,625	4.70	7,638
1996	27	25	55.0	1,375	4.40	6,050
1997	25	24	48.0	1,152	3.51	4,044
1998	24	23	58.0	1,334	2.70	3,602
1999	26	25	56.0	1,400	3.10	4,340
2000	23	21	50.0	1,050	3.55	3,728
2001	20	16	49.0	784	3.30	2,587
2002	15	11	47.0	517	5.15	2,663
<b>All Wheat</b>						
1995	177	170	50.5	8,585	4.74	40,698
1996	202	185	40.3	7,455	4.40	33,106
1997	195	189	46.3	8,742	3.32	29,015
1998	179	173	51.1	8,834	2.94	25,727
1999	176	170	52.6	8,940	2.65	23,944
2000	173	166	41.3	6,850	3.25	22,578
2001	160	141	42.8	6,034	3.30	19,912
2002	155	136	36.0	4,892	4.75	23,226
<b>Barley</b>						
1995	100	93	88.0	8,184	3.08	25,207
1996	110	100	80.0	8,000	2.93	23,440
1997	100	95	84.0	7,980	2.29	18,274
1998	95	85	83.0	7,055	1.86	13,122
1999	90	83	82.0	6,806	1.89	12,863
2000	95	78	70.0	5,460	2.00	10,920
2001	85	65	68.0	4,420	2.14	9,459
2002	70	45	64.0	2,880	2.35	6,768
<b>Oats</b>						
1995	50	9	68.0	612	2.05	1,255
1996	45	9	70.0	630	2.10	1,323
1997	50	10	72.0	720	1.97	1,418
1998	50	9	70.0	630	1.45	914
1999	45	9	75.0	675	1.50	1,013
2000	50	7	70.0	490	1.65	809
2001	60	6	65.0	390	2.25	878
2002	60	5	90.0	450	2.50	1,125

<sup>1</sup> Winter wheat was planted the previous fall and some barley may have been planted the previous fall.

## Corn Planted and Harvested for Silage and Grain: Acreage, Yield, Production, and Value, Utah, 1995-2002

Year	Planted All Purposes	Acres Harvested	Yield Per Acre	Production	Marketing Year Average Price	Value of Production
<b>Silage</b>						
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Tons</i>	<i>1,000 Tons</i>	<i>Dollars per Ton <sup>1</sup></i>	<i>1,000 Dollars</i>
1995	66	45	20.0	900	25.00	22,500
1996	62	40	21.0	840	28.00	23,520
1997	62	41	23.0	943	28.00	26,404
1998	62	37	21.0	777	26.00	20,202
1999	61	40	21.0	840	25.00	21,000
2000	64	45	21.0	945	27.00	25,515
2001	60	44	21.0	924	33.00	30,492
2002	55	40	20.0	800	31.00	24,800
<b>Grain</b>						
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Bushels</i>	<i>1,000 Bushels</i>	<i>Dollars per Bushel</i>	<i>1,000 Dollars</i>
1995	66	20	100.0	2,000	3.88	7,760
1996	62	20	139.0	2,780	3.80	10,564
1997	62	20	147.0	2,940	3.05	8,967
1998	62	24	141.0	3,384	2.45	8,291
1999	61	20	143.0	2,860	2.36	6,750
2000	64	18	144.0	2,592	2.61	6,765
2001	60	15	142.0	2,130	2.65	6,071
2002	55	14	145.0	2,030	3.30	6,699

<sup>1</sup> Price or value per ton in silo or pit.

## Field Crops: Acreage, Yield, Production, and Value, Utah, 1995-2003

Crop & Year	Acres		Yield per Acre	Production	Price per cwt	Value of Production
	Planted	Harvested				
<b>Dry Beans <sup>1</sup></b>						
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Pounds</i>	<i>1,000 Cwt</i>	<i>Dollars per Cwt</i>	<i>1,000 Dollars</i>
1995	7.3	7.0	460	32	19.00	608
1996	5.0	0.6	1,600	10	24.00	240
1997	5.8	5.2	800	42	20.00	840
1998	6.0	5.9	510	30	17.50	525
1999	6.7	6.6	800	53	17.70	938
2000	5.4	3.0	330	10	20.60	206
2001	6.1	5.7	300	17	27.00	459
2002	1.8	0.3	1,670	5	20.00	100
<b>Potatoes</b>						
	<i>1,000 Acres</i>	<i>1,000 Acres</i>	<i>Cwt</i>	<i>1,000 Cwt</i>	<i>Dollars per Cwt</i>	<i>1,000 Dollars</i>
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	3.3	3.3	290	957	4.35	4,163
1998	2.7	2.6	280	728	4.85	3,531
1999	2.0	2.0	290	580	5.15	2,987
2000	1.5	1.5	290	435	5.10	2,219
2001	1.3	1.3	265	345	8.05	2,777
2002	0.8	0.8	305	244	8.20	2,001

<sup>1</sup> Excludes beans grown for garden seed.

### Potatoes: Production, Farm Use, Sales, and Value, Utah, 1995-2002

Year	Production	Total Used for Seed <sup>1</sup>	Farm Disposition			Price per Cwt	Value of	
			Where Grown		Sold		Production	Sales
			Seed, Feed, Home	Shrink and Loss				
	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>1,000 Cwt</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>
1995	1,224	103	2	125	1,097	5.10	6,242	5,595
1996	1,176	83	1	108	1,067	4.90	5,762	5,228
1997	957	68	1	68	888	4.35	4,163	3,863
1998	728	48		73	655	4.85	3,531	3,177
1999	580	39	6	41	533	5.15	2,987	2,745
2000	435	29	3	108	324	5.10	2,219	1,652
2001	345	17	2	11	332	8.05	2,777	2,673
2002 <sup>2</sup>	244	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	( <sup>3</sup> )	8.20	2,001	( <sup>3</sup> )

<sup>1</sup> Includes seed purchased and seed used on farms where grown.

<sup>2</sup> Preliminary.

<sup>3</sup> Available in the "Potatoes 2003 Summary", released in September.

### Onions: Summer Storage (Fresh Market), Acreage, Yield, Production, and Value Utah, 1995-2002

Year	Acreage		Yield per Acre	Production	Quantity Not Sold <sup>1</sup>	Sales	Value of Sales	
	Planted	Harvested					Per Cwt	Total
	<i>Acres</i>	<i>Acres</i>					<i>Cwt</i>	<i>1,000</i>
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	2,400	2,300	485	1,116	160	956	8.84	8,451
1998	2,500	2,400	440	1,056	99	957	11.00	10,527
1999	2,800	2,700	465	1,256	265	991	5.80	5,748
2000	2,500	2,400	475	1,140	110	1,030	9.30	9,579
2001	2,200	2,100	455	956	122	834	7.70	6,422
2002	2,200	2,100	500	1,050	153	897	8.20	7,355

<sup>1</sup> Includes shrinkage, waste, and cullage.



**Grain Stocks Stored Off Farm: Wheat, Barley, Oats, and Corn  
Utah, by Quarters, 1995-2003 <sup>1</sup>**

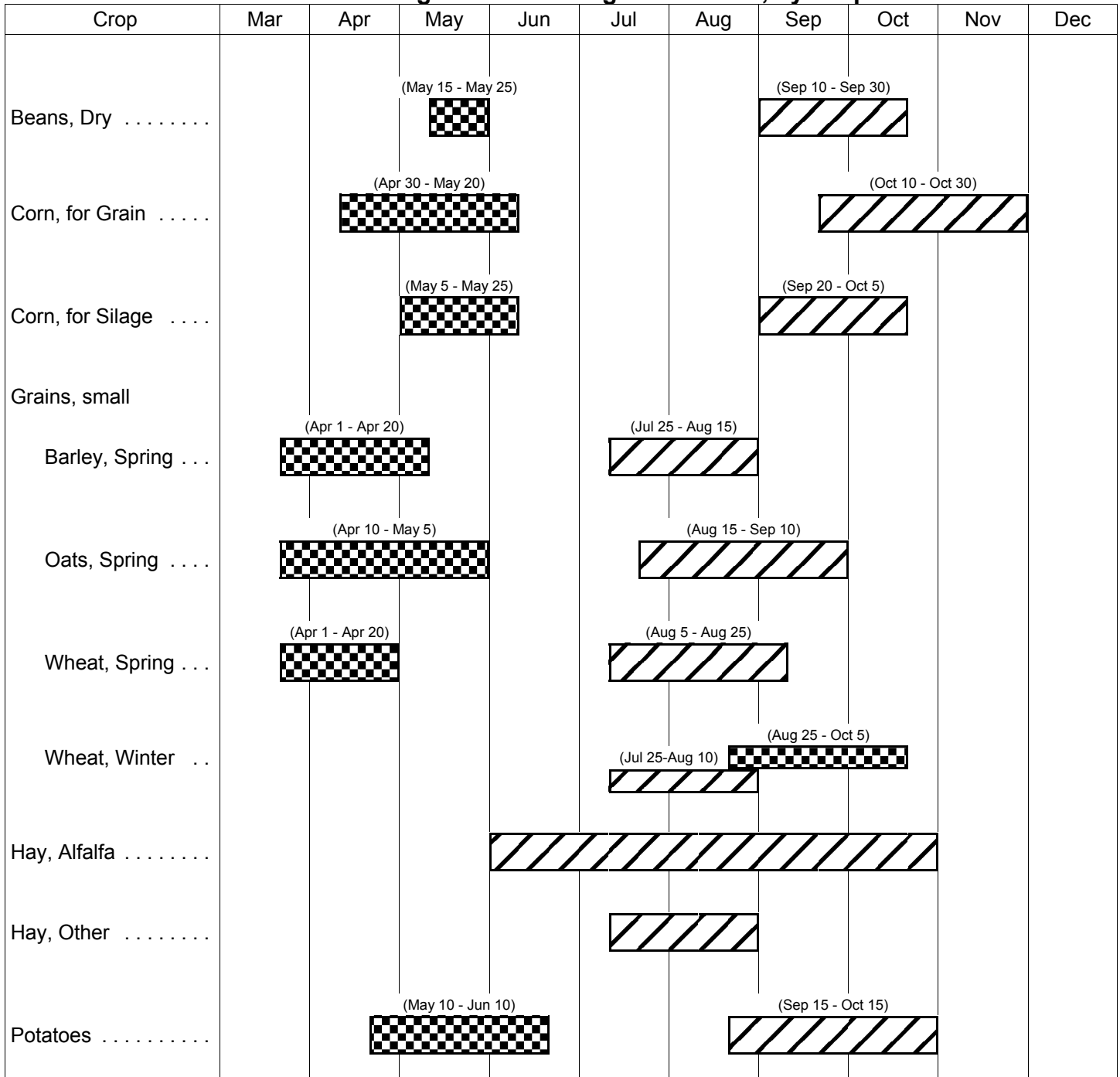
Year	March 1	June 1	September 1	December 1
	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>	<i>1,000 Bushels</i>
<b>All Wheat</b>				
1995	5,106	3,625	5,165	5,807
1996	5,143	3,684	2,998	3,248
1997	3,775	3,398	4,401	6,410
1998	5,557	4,894	5,472	5,538
1999	5,266	4,261	4,685	4,587
2000	5,737	4,499	5,214	5,266
2001	5,186	5,710	4,522	4,089
2002	4,794	4,389	4,983	5,003
2003	4,730	4,050	( <sup>2</sup> )	
<b>Barley</b>				
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	679	1,523	1,417
1999	903	713	1,698	1,678
2000	1,244	721	1,461	1,327
2001	811	346	1,102	836
2002	547	229	1,540	770
2003	651	256	( <sup>2</sup> )	
<b>Oats</b>				
1995	( <sup>3</sup> )	52	142	115
1996	71	136	76	( <sup>3</sup> )
1997	119	37	( <sup>3</sup> )	95
1998	96	32	68	( <sup>3</sup> )
1999	( <sup>3</sup> )	46	197	97
2000	97	69	323	150
2001	83	32		74
2002	82	54	64	
2003	95	45	( <sup>2</sup> )	
<b>Corn</b>				
1995	564	432	475	543
1996	609	377	476	865
1997	697	261	( <sup>3</sup> )	632
1998	727	560	630	687
1999	763	( <sup>3</sup> )	( <sup>3</sup> )	763
2000	537	592	284	684
2001	608	245	328	740
2002	852	425	749	867
2003	1,048	734	( <sup>2</sup> )	

<sup>1</sup> Includes stocks at mills, elevators, warehouses, terminals, and processors.

<sup>2</sup> Estimates available in the September Grain Stocks release.

<sup>3</sup> 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

Source: USDA publication "Usual Planting and Harvesting Dates for U.S. Field Crops", December 1997

# Crop Progress

## Oats Progress

Percent completed

Planted				Harvested - Hay/Silage				Harvested for Grain			
Date	2001	2002	5-year Average	Date	2001	2002	5-year Average	Date	2001	2002	5-year Average
Apr 05	25	14	17	Jun 20	4	7	3	Jul 25	19	6	6
Apr 10	32	23	23	Jun 25	13	18	6	Jul 30	21	14	11
Apr 15	35	34	30	Jun 30	27	34	17	Aug 05	25	25	20
Apr 20	49	39	40	Jul 05	45	45	31	Aug 10	30	32	30
Apr 25	57	47	50	Jul 10	60	56	43	Aug 15	38	43	39
Apr 30	62	56	59	Jul 15	67	67	53	Aug 20	49	53	53
May 05	68	67	68	Jul 20	75	75	63	Aug 25	59	63	65
May 10	76	76	76	Jul 25	80	83	69	Aug 30	75	72	73
May 15	83	83	83	Jul 30	84	87	77	Sept 05	88	79	81
May 20	89	88	89	Aug 05	87	88	82	Sept 10	92	85	86
May 25	97	91	94	Aug 10	89	91	85	Sept 15	99	91	91
May 30	100	95	98	Aug 15	94	93	89	Sept 20	100	97	95

## Barley Progress

Percent Completed

Planted				Harvested for Grain			
Date	2001	2002	5-year Average	Date	2001	2002	5-year Average
Apr 05	32	26	42	Jul 10	5	1	1
Apr 10	45	39	55	Jul 15	5	3	2
Apr 15	51	52	64	Jul 20	11	7	7
Apr 20	68	56	71	Jul 25	18	12	15
Apr 25	81	66	78	Jul 30	28	21	26
Apr 30	89	75	86	Aug 05	43	38	43
May 05	94	84	92	Aug 10	54	47	55
May 10	98	92	96	Aug 15	65	63	69
May 15	100	97	98	Aug 20	77	78	79
May 20			99	Aug 25	85	87	86
May 25				Aug 30	94	94	93
May 30				Sep 05	100	99	98

## Wheat Progress

Percent Completed

### Harvested for Grain

Date	2001	2002	5-year Average
Jul 10	9	2	3
Jul 15	13	5	10
Jul 20	18	11	17
Jul 25	27	17	23
Jul 30	40	31	36
Aug 05	56	61	54
Aug 10	73	68	65
Aug 15	83	76	75
Aug 20	90	83	85
Aug 25	98	89	94
Aug 30	100	95	99
Sep 05	100	99	100

### Planted <sup>1</sup>

Date	2001	2002	5-year Average
Aug 30	6	1	2
Sep 05	16	4	10
Sep 10	24	10	17
Sep 15	27	17	26
Sep 20	32	35	38
Sep 25	39	53	50
Sep 30	45	69	63
Oct 05	55	72	73
Oct 10	62	80	80
Oct 15	69	87	86
Oct 20	80	89	92
Oct 25	83	91	95

<sup>1</sup> Planted for Harvest Next Year

## Corn Progress

Percent Completed

### Planted

Date	2001	2002	5-year Average
Apr 20	4	3	3
Apr 25	12	6	7
Apr 30	21	14	14
May 05	34	25	27
May 10	45	43	42
May 15	57	59	57
May 20	70	72	69
May 25	82	82	79
May 30	93	89	90
Jun 05	100	96	97
Jun 10	100	100	99
Jun 15	100	100	100

### Harvested for Silage

Date	2001	2002	5-year Average
Sep 05	6	7	6
Sep 10	11	11	10
Sep 15	28	15	18
Sep 20	45	25	28
Sep 25	61	39	41
Sep 30	75	55	58
Oct 05	86	67	73
Oct 10	94	80	85
Oct 15	100	89	93
Oct 20	100	93	97
Oct 25	100	98	100
Oct 30	100	100	100

### Harvested for Grain

Date	2001	2002	5-year Average
Oct 05	5	2	3
Oct 10	14	7	9
Oct 15	26	14	19
Oct 20	34	22	28
Oct 25	50	26	37
Oct 30	67	33	47
Nov 05	85	44	61
Nov 10	98	49	72
Nov 15	100	58	80
Nov 20	100	66	84
Nov 25			90
Nov 30			

## Alfalfa Progress

Percent Completed

### First Cutting

Date	2001	2002	5-year Average
May 05			
May 10			
May 15	3	6	2
May 20	12	15	8
May 25	22	22	14
May 30	35	27	23
Jun 05	54	36	36
Jun 10	74	48	51
Jun 15	83	72	65
Jun 20	89	80	76
Jun 25	94	86	85
Jun 30	99	93	93

### Second Cutting

Date	2001	2002	5-year Average
Jun 20	11		3
Jun 25	16	1	5
Jun 30	19	4	7
Jul 05	28	13	14
Jul 10	37	25	24
Jul 15	46	39	37
Jul 20	55	57	50
Jul 25	67	70	61
Jul 30	78	81	72
Aug 05	85	88	82
Aug 10	90	92	90
Aug 15	95	97	95

### Third Cutting

Date	2001	2002	5-year Average
Jul 25	18	5	5
Jul 30	20	10	6
Aug 05	23	16	11
Aug 10	31	23	17
Aug 15	35	32	25
Aug 20	38	40	34
Aug 25	48	45	43
Aug 30	57	53	51
Sep 05	68	63	62
Sep 10	76	71	72
Sep 15	83	79	79
Sep 20	88	84	85

# Fruits

## Fruit: Acreage, Yield, Production, Use, and Value, Utah, 1995-2002

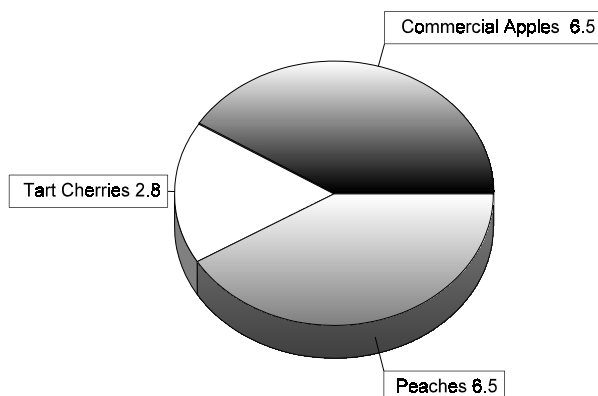
Fruit & Year	Bearing Acreage	Yield per Acre <sup>1</sup>	Production				Utilization		Price per Pound	Value of Utilized Production
			Total	Unutilized		Utilized	Fresh	Processed		
				Un-Harvested	Harvested not Sold					
	Acres	Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Million Pounds	Dollars	1,000 Dollars
<b>Commercial Apples</b>										
1995	3,000	6,670	20.0	1.0		19.0	13.0	6.0	0.188	3,580
1996	2,800	17,100	48.0	1.0	3.0	44.0	33.0	11.0	0.136	5,984
1997	2,800	15,000	42.0	1.0		41.0	34.0	7.0	0.165	6,747
1998	2,800	16,100	45.0	14.0		31.0	26.0	5.0	0.145	4,480
1999	2,800	3,210	9.0			9.0	8.0	1.0	0.219	1,970
2000	2,800	17,500	49.0	6.0		43.0	28.0	15.0	0.118	5,060
2001	2,800	10,700	30.0	6.0		24.0	16.0	8.0	0.172	4,136
2002	2,800	2,500	7.0	0.5		6.5	5.5	1.0	0.213	1,384
<b>Tart Cherries</b>										
1995	3,200	6,880	22.0	5.0	4.0	13.0		13.0	0.048	624
1996	3,000	8,830	26.5	3.5	2.5	20.5		20.5	0.127	2,604
1997	2,800	6,250	17.5	2.0	1.5	14.0		14.0	0.160	2,240
1998	2,800	11,800	33.0	6.0		27.0		27.0	0.160	4,320
1999	2,800	5,180	14.5			14.5		14.5	0.186	2,697
2000	2,800	11,800	33.0	5.0	1.0	27.0		27.0	0.220	5,940
2001	2,800	4,290	12.0	0.5		11.5		11.5	0.218	2,507
2002	2,800	1,070	3.0	0.1	0.1	2.8		2.8	0.240	672
<b>Peaches</b>										
1995	1,100	6,270	6.9	0.2		6.7	6.7		0.250	1,675
1996	1,200	6,250	7.5	0.1	0.1	7.3	7.3		0.320	2,336
1997	1,300	6,230	8.1	0.2	0.3	7.6	7.6		0.270	2,052
1998	1,300	5,690	7.4	0.3	0.1	7.0	7.0		0.270	1,890
1999	1,300	4,770	6.2			6.2	( <sup>2</sup> )	( <sup>2</sup> )	0.328	2,034
2000	1,300	8,460	11.0	0.6	0.4	10.0	( <sup>2</sup> )	( <sup>2</sup> )	0.300	3,000
2001	1,300	6,920	9.0		0.1	8.9	( <sup>2</sup> )	( <sup>2</sup> )	0.218	1,936
2002	1,300	5,000	6.5			6.5	( <sup>2</sup> )	( <sup>2</sup> )	0.312	2,031

<sup>1</sup> Yield is based on total production.

<sup>2</sup> Not published to avoid disclosure of individual operations.

### Utah Apples, Tart Cherries, & Peaches

Utilized Production (million pounds) 2002



## Fruit: Acreage, Yield, Production, Use, and Value, Utah, 1995-2002

Fruit & Year	Bearing Acreage	Yield per Acre <sup>1</sup>	Production				Utilization		Price per Ton	Value of Utilized Production
			Total	Unutilized		Utilized	Fresh	Processed		
				Un-Harvested	Harvested not Sold					
	<i>Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	
<b>Apricots</b>										
1995 <sup>3</sup>										
1996	( <sup>2</sup> )	( <sup>2</sup> )	300	10		290	( <sup>2</sup> )	( <sup>2</sup> )	859	249
1997	( <sup>2</sup> )	( <sup>2</sup> )	130			130	( <sup>2</sup> )	( <sup>2</sup> )	492	64
1998	( <sup>2</sup> )	( <sup>2</sup> )	190	10		180	( <sup>2</sup> )	( <sup>2</sup> )	728	131
1999 <sup>3</sup>										
2000	( <sup>2</sup> )	( <sup>2</sup> )	400	90	50	260	( <sup>2</sup> )	( <sup>2</sup> )	612	159
2001	( <sup>2</sup> )	( <sup>2</sup> )	260	10	20	230	( <sup>2</sup> )	( <sup>2</sup> )	852	196
2002	( <sup>2</sup> )	( <sup>2</sup> )	140	10		130	( <sup>2</sup> )	( <sup>2</sup> )	708	92
<b>Sweet Cherries</b>										
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	600	1.20	720	20		700	420	280	920	644
1998	600	4.50	2,700			2,700	800	1,900	687	1,854
1999	600	1.92	1,150			1,150	800	350	999	1,149
2000	600	4.00	2,400	100		2,300	1,600	700	1,060	2,430
2001	600	1.17	700	50		650	300	350	791	514
2002	600	0.67	400	20		380	140	240	1,540	586
<b>Pears</b>										
1995	190	4.21	800	50		750	750		460	345
1996	190	6.84	1,300	50	50	1,200	1,200		483	580
1997	180	3.89	700	25	25	650	650		586	381
1998	180	5.00	900	30		870	870		307	267
1999	180	1.67	300	3	2	295	( <sup>2</sup> )	( <sup>2</sup> )	458	135
2000	180	3.33	600	40	100	460	( <sup>2</sup> )	( <sup>2</sup> )	533	245
2001	180	1.67	300			300	( <sup>2</sup> )	( <sup>2</sup> )	583	175
2002	180	1.94	350			350	( <sup>2</sup> )	( <sup>2</sup> )	643	225

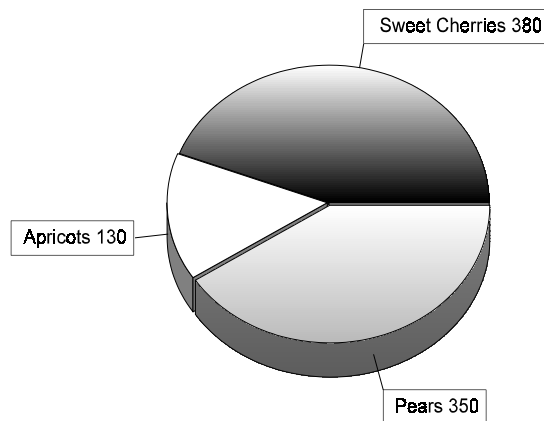
<sup>1</sup> Yield is based on total production.

<sup>2</sup> Not published to avoid disclosure of individual operations.

<sup>3</sup> No significant commercial production due to frost damage.

### Utah Apricots, Sweet Cherries & Pears

Utilized Production (tons) 2002



# Floriculture

## Floriculture Crops: Wholesale Value of Sales, Utah, Selected Types, 1995-2002 <sup>1</sup>

Year	Total Cut Flowers	Total Potted Flowering Plants	Total Foliage for Indoor or Patio Use	Total Bedding/Garden Plants	Annual Bedding/Garden Plants	Herbaceous Perennial Plants	Total Wholesale Value of Reported Crops
	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>
1995	2,811	8,581	2,033	12,780	--	--	26,205
1996	1,865	7,326	2,386	12,532	--	--	24,146
1997	708	10,121	1,512	13,644	--	--	25,985
1998	153	9,641	845	19,054	--	--	29,693
1999	--	8,614	5,544	22,105	--	--	36,263
2000	--	11,040	2,282	17,220	13,798	3,422	30,542
2001	--	8,389	4,165	18,060	14,384	3,676	30,604
2002	--	12,274	3,963	20,347	15,974	4,373	36,584

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

## Hanging Baskets: Quantity Sold Wholesale, Utah, Selected Types, 1995-2002

Year	Geraniums	Foliage	Petunias	New Guinea Impatiens	Impatiens	Other Flowering and Foliar Type
	<i>1,000 Baskets</i>	<i>1,000 Baskets</i>	<i>1,000 Baskets</i>	<i>1,000 Baskets</i>	<i>1,000 Baskets</i>	<i>1,000 Baskets</i>
1995	--	--	--	--	--	40
1996	--	--	--	--	--	49
1997	--	--	--	10	--	63
1998	--	--	13	10	--	65
1999	16	--	11	3	--	83
2000	16	--	11	3	--	83
2000	21	282	11	5	-	93
2002	24	--	11	8	-	123

**Potted Flowers: Quantity Sold Wholesale, Utah, Selected Types, 1995-2002 <sup>1</sup>**

Year	Begonias	Geraniums		Poinsettias	New Guinea Impatiens	Impatiens	Other Flowering and Foliar Type Bedding Plants
		from Vegetative Cuttings	from Seed				
	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>
1995	--	--	--	709	52	--	676
1996	--	--	--	467	47	--	1,368
1997	--	--	--	851	43	--	1,444
1998	--	--	--	930	49	--	2,198
1999	--	587	593	634	86	60	1,967
2000	40	673	581	877	92	24	702
2001	55	680	554	961	69	22	494
2002	68	665	527	848	51	--	1,106

**Potted Flowers: Quantity Sold Wholesale, Utah, Selected Types, 1995-2002 <sup>1</sup> (continued)**

Year	Other Potted Flowering Plants	Vegetable Type Bedding Plants	Hardy Garden Chrysanthemums	Potted Hosta	Petunias	Marigolds	Other Herbaceous Perennials
	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>	<i>1,000 Pots</i>
1995	--	--	170	--	--	--	--
1996	--	--	242	--	--	--	--
1997	--	--	204	--	--	--	--
1998	--	--	198	--	--	--	--
1999	--	258	217	--	101	--	--
2000	--	430	201	21	77	72	1,980
2001	632	300	137	23	--	62	1,931
2002	--	350	--	59	--	64	2,309

**Bedding Plants (Flats): Quantity Sold Wholesale, Utah, Selected Types, 1995-2002 <sup>1</sup>**

Year	Impatiens	Marigolds	Begonias	Geraniums from Seed	Pansy/Viola	Petunias	All Other Flowering and Foliar Type	Vegetable Type
	<i>1,000 Flats</i>	<i>1,000 Flats</i>	<i>1,000 Flats</i>	<i>1,000 Flats</i>	<i>1,000 Flats</i>	<i>1,000 Flats</i>	<i>1,000 Flats</i>	<i>1,000 Flats</i>
1995	76	--	--	--	--	151	676	130
1996	80	--	--	--	--	163	656	124
1997	68	--	--	--	--	210	592	101
1998	80	--	--	--	--	192	861	158
1999	93	--	--	--	--	211	1,031	147
2000	72	93	41	1	104	212	377	99
2001	70	113	44	5	118	212	482	95
2002	66	114	14	5	154	247	419	122

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



# Cattle and Calves

## Cattle: Farms, Inventory, and Value, Utah, January 1, 1996-2003

Year	Farms		All Cattle and Calves on Farms January 1			
	with Cattle	with Milk Cows	On Feed for Market	Total Number	Value	
	Number	Number	1,000 Head	1,000 Head	Per Head Dollars	Total 1,000 Dollars
1996	7,800	900	60	910	510	464,100
1997	7,800	900	50	930	530	492,900
1998	8,000	900	40	910	600	546,000
1999	7,900	860	40	890	590	525,100
2000	8,000	830	35	910	660	600,600
2001	8,000	760	35	910	720	655,200
2002	7,800	700	25	920	770	708,400
2003			30	880	760	668,800

## Cattle: Inventory by Classes and Weight, Utah, January 1, 1996-2003

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 Replacements	Milk Cow Replacements	Other			
	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head	1,000 Head
1996	910	440	350	90	175	68	43	64	138	22	135
1997	930	445	355	90	191	70	48	73	135	24	135
1998	910	430	355	90	198	68	50	80	120	22	125
1999	890	430	335	95	185	72	43	70	120	22	133
2000	910	450	355	95	190	70	46	74	112	23	135
2001	910	450	355	95	190	75	46	69	122	23	125
2002	920	450	357	93	190	75	44	71	126	24	130
2003	880	430	339	91	190	75	45	70	125	22	113

## All Cattle & Calves: Number of Operations & Percent of Total Inventory by Size Groups, 1997-2002

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
1997	4,200	6.7	1,000	7.3	2,200	46.0	260	17.0	140	23.0
1998	4,500	7.5	1,220	9.5	1,900	43.0	250	18.0	130	22.0
1999	4,500	6.5	1,200	9.5	1,800	42.0	270	19.0	130	23.0
2000	4,400	7.0	1,300	10.0	1,900	43.0	270	18.0	130	22.0
2001	4,600	8.0	1,200	9.0	1,800	41.0	270	19.0	130	23.0
2002	4,400	7.5	1,300	9.5	1,700	41.0	270	19.0	130	23.0

## Beef Cows: Number of Operations & Percent of Total Inventory by Size Groups, 1997-2002

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
1997	3,600	12.0	870	15.0	910	45.0	120	28.0
1998	3,700	15.0	900	17.0	900	45.0	100	23.0
1999	3,700	13.0	900	17.0	910	46.0	90	24.0
2000	3,700	13.0	950	16.0	960	48.0	90	23.0
2001	3,700	14.0	950	16.0	960	48.0	90	22.0
2002	3,600	13.0	950	16.0	960	49.0	90	22.0

## Cattle and Calves: Production, Marketings and Income, Utah, 1995 - 2002

Year	Production <sup>1</sup>	Marketings <sup>2</sup>	Average Price per 100 Lbs				Value of Production	Cash Receipts <sup>3</sup>	Value of Home Consumption	Gross Income
			Cattle			Calves				
			Cows	Steers & Heifers	All					
	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>
1995	375,125	419,900	37.50	63.10	61.40	71.10	233,546	261,438	5,747	267,185
1996	380,400	441,840	32.00	57.00	55.00	58.00	210,401	244,193	5,148	249,341
1997	392,665	482,880	37.00	68.00	65.00	80.00	260,681	319,899	6,084	325,983
1998	372,580	471,850	34.00	65.00	63.00	81.00	242,276	304,277	5,897	310,174
1999	390,090	463,950	36.80	68.30	66.10	86.40	265,492	314,162	6,187	320,349
2000	402,500	477,290	38.60	73.80	71.30	98.90	296,585	350,945	6,674	357,619
2001	397,185	475,650	40.80	79.30	76.60	104.00	314,868	374,459	7,170	381,629
2002	398,685	500,280	37.20	71.90	69.50	93.10	284,580	356,693	6,505	363,198

<sup>1</sup> Includes custom slaughter for use on farms where produced and State outshipments, but excludes interfarm sales within the State.

<sup>2</sup> Excludes custom slaughter at commercial establishments.

<sup>3</sup> Receipts from marketings and sale of farm slaughter.

## Cattle and Calves: Balance Sheet, Utah, 1995 - 2002

Year	Inventory Beginning of Year	Calf Crop	Inshipments	Marketings <sup>1</sup>		Farm Slaughter Cattle & Calves <sup>2</sup>	Deaths		Inventory End of Year
				Cattle	Calves		Cattle	Calves	
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>
1995	890	390	97	332	91	4	14	26	910
1996	910	395	120	349	96	4	15	31	930
1997	930	390	115	385	98	4	13	25	910
1998	910	380	113	375	95	4	12	27	890
1999	890	390	135	370	90	4	14	27	910
2000	910	400	120	380	94	4	14	28	910
2001	910	400	126	380	90	4	15	27	920
2002	920	390	110	400	93	4	16	27	880

<sup>1</sup> Includes custom slaughter for use on farms where produced and State outshipments, but excludes interfarm sales within the State.

<sup>2</sup> Excludes custom slaughter at commercial establishments.

## Calf Crop: Utah, 1995 - 2003

Year	Cows That Have Calved January 1	Calf Crop	
		Total	Percent of Cows Calved January 1 <sup>1</sup>
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Percent</i>
1995	430	390	91
1996	440	395	90
1997	445	390	88
1998	430	380	88
1999	430	390	91
2000	450	400	89
2001	450	400	89
2002	450	390	87
2003	430	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> 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.

<sup>2</sup> Not published to avoid disclosure of individual operations.

<sup>3</sup> Data not available until 2004.

# Dairy

## Dairy: Farms, Milk Production and Milkfat, Utah, 1995-2002

Year	Farms With Milk Cows	Number of Milk Cows on Farms <sup>1</sup>	Production of Milk & Milkfat <sup>2</sup>				
			Milk Per Cow		Total		
			Milk	Milkfat	Percentage Milkfat	Milk	Milkfat
	<i>Number</i>	<i>1,000 Head</i>	<i>Pounds</i>	<i>Pounds</i>	<i>Percent</i>	<i>Million Pounds</i>	<i>Million Pounds</i>
1995	1,000	88	16,739	604	3.61	1,473	53.2
1996	900	91	17,000	617	3.63	1,547	56.2
1997	900	91	16,923	609	3.60	1,540	55.4
1998	900	90	16,811	609	3.62	1,513	54.8
1999	860	92	17,587	637	3.62	1,618	58.6
2000	830	96	17,573	638	3.63	1,687	61.2
2001	760	93	17,581	640	3.64	1,635	59.5
2002	700	93	17,839	648		1,659	60.2

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

<sup>2</sup> Milk sold to plants and dealers as whole milk and equivalent amounts of milk for cream. Includes milk produced by dealers' own herds and small amounts sold directly to consumers. Also includes milk produced by institutional herds. Excludes milk sucked by calves.

## Milk Disposition: Milk Used and Marketed by Producers, Utah, 1995-2002

Year	Milk Used Where Produced			Milk Marketed by Producers	
	Fed to calves <sup>1</sup>	Used for Milk, Cream, and Butter	Total	Total	Fluid Grade <sup>2</sup>
	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Million Pounds</i>	<i>Percent</i>
1995	24	2	26	1,447	90
1996	24	3	27	1,520	91
1997	18	2	20	1,520	91
1998	10	2	12	1,501	91
1999	18	2	20	1,598	92
2000	24	2	26	1,661	94
2001	23	2	25	1,610	96
2002	18	2	20	1,639	98

<sup>1</sup> Excludes milk sucked by calves.

<sup>2</sup> Percentage of milk sold that is eligible for fluid use (grade A for fluid use). Includes fluid-grade milk used in manufacturing dairy products.

**Milk Cows: Number of Operations & Percent of Total Inventory & Production  
by Size Groups, 1995-2002**

Year	Operations Having								
	1-29 Head			30-49 Head			50-99 Head		
	Operations	Inventory	Production	Operations	Inventory	Production	Operations	Inventory	Production
	<i>Number</i>	<i>Percent</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>
1995	400	1.5	1.0	70	3.5	2.0	210	17.0	15.0
1996	300	1.3	1.0	70	2.7	2.0	190	16.0	14.0
1997	320	1.3	1.0	70	2.7	2.0	165	13.0	10.0
1998	340	1.5	1.0	60	2.5	2.0	165	13.0	10.0
1999	280	0.9	1.0	60	2.1	2.0	190	14.0	12.0
2000	300	0.9	0.6	55	2.1	1.9	150	11.0	9.5
2001	270	1.0	0.7	35	1.0	0.8	140	11.0	9.5
2002	240	1.0	0.7	40	1.5	1.3	110	8.5	7.0

**Milk Cows: Number of Operations & Percent of Total Inventory & Production  
by Size Groups, 1995-2002(continued)**

Year	Operations Having								
	100-199 Head			200-499 Head <sup>1</sup>			500+ Head		
	Operations	Inventory	Production	Operations	Inventory	Production	Operations	Inventory	Production
	<i>Number</i>	<i>Percent</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>	<i>Number</i>	<i>Percent</i>	<i>Percent</i>
1995	200	32.0	32.0	120	46.0	50.0			
1996	210	31.0	31.0	130	49.0	52.0			
1997	210	29.0	30.0	110	35.0	38.0	25	19.0	19.0
1998	190	25.0	28.0	120	37.0	39.0	25	21.0	20.0
1999	180	24.0	23.0	120	35.0	35.0	30	24.0	27.0
2000	180	25.0	24.0	110	32.0	34.0	35	29.0	30.0
2001	170	24.0	23.0	110	33.0	34.0	35	30.0	32.0
2002	160	23.0	21.0	110	31.0	32.0	40	35.0	38.0

<sup>1</sup> In 1995-1996, operations were not divided into 200-499 head and 500+. Data for 1995-1996 is for operations with 200+ head.

## Dairy: Milk Cows and Milk Production, Utah, by Quarter, 1995-2002

Year	Jan-Mar	Apr-Jun	Jul-Sep	Oct-Dec	Annual Total <sup>1</sup>
<b>Milk Cows (1,000 Head) <sup>2 3</sup></b>					
1995	87	88	88	88	88
1996	90	92	92	90	91
1997	92	93	91	89	91
1998	88	90	90	93	90
1999	91	92	93	93	92
2000	94	96	97	95	96
2001	93	93	93	93	93
2002	93	92	93	92	93
<b>Milk per Cow (Pounds) <sup>4 5</sup></b>					
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
1998	4,102	4,311	4,256	4,097	16,811
1999	4,220	4,489	4,441	4,387	17,587
2000	4,362	4,521	4,515	4,263	17,573
2001	4,237	4,452	4,505	4,387	17,581
2002	4,204	4,598	4,688	4,446	17,839
<b>Milk Produced (Million Pounds) <sup>4 6</sup></b>					
1995	353	378	379	363	1,473
1996	358	397	401	391	1,547
1997	374	406	394	366	1,540
1998	361	388	383	381	1,513
1999	384	413	413	408	1,618
2000	410	434	438	405	1,687
2001	394	414	419	408	1,635
2002	391	423	436	409	1,659

<sup>1</sup> Milk cows is average number during year, milk per cow and milk produced is total for year.

<sup>2</sup> Includes dry cows, excludes heifers not yet freshened.

<sup>3</sup> Average for quarter.

<sup>4</sup> Excludes milk sucked by calves.

<sup>5</sup> Quarterly milk production divided by quarterly average of milk cows.

<sup>6</sup> Total produced for quarter.

## Milk & Cream: Marketings, Used on Farm, Income, and Value, Utah, 1995-2002

Year	Combined Marketings of Milk & Cream				Used for Milk, Cream & Butter by Producers		Gross Producer Income <sup>1</sup>	Value of Milk Produced <sup>2</sup>
	Milk Utilized	Average Returns		Cash Receipts from Marketings	Milk Utilized	Value		
		Per 100 Pounds Milk	Per Pound Milkfat					
	<i>Million Pounds</i>	<i>Dollars</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	<i>Million Pounds</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>
1995	1,447	12.10	3.48	181,837	2	251	182,088	185,104
1996	1,520	14.00	3.98	219,476	3	433	219,909	223,375
1997	1,520	12.30	3.58	195,825	2	258	196,083	198,402
1998	1,501	15.40	4.25	231,154	2	308	231,462	233,002
1999	1,598	13.90	3.84	222,122	2	278	222,400	224,902
2000	1,661	11.20	3.09	186,032	2	224	186,256	188,944
2001	1,610	14.70	4.04	236,670	2	294	236,964	240,345
2002	1,639	11.80	3.25	193,402	2	236	193,638	195,762

<sup>1</sup> Cash receipts from marketings of milk and cream, plus value of milk used for home consumption.

<sup>2</sup> Includes value of milk fed to calves.

## Manufactured Dairy Products, Utah, 1995-2002

Year	Hard Ice Cream	Sherbet	Total Cheese
	<i>1,000 Gallons</i>	<i>1,000 Gallons</i>	<i>1,000 Pounds</i>
1995	12,035	638	80,893
1996	11,323	751	84,702
1997	10,423	1,096	63,531
1998	10,869	1,265	63,282
1999	11,369	1,408	75,628
2000	12,825	1,306	74,795
2001	15,045	1,569	62,596
2002	14,733	1,330	66,296

<sup>1</sup> Excludes cottage cheese

# Sheep and Wool

## Sheep and Lambs: Farms, Inventory, and Value, Utah, January 1, 1996-2003

Year	Operations with Sheep	All Sheep and Lambs on Farms January 1				
		Number <sup>1</sup>	Value		Total Breeding	Total Market
			Per Head	Total		
	<i>Number</i>	<i>1,000 Head</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	<i>1,000</i>	<i>1,000</i>
1996	1,900	460	100.00	46,000	400	60
1997	1,700	440	110.00	48,400	395	45
1998	1,500	420	120.00	50,400	380	40
1999	1,500	400	100.00	40,000	360	40
2000	1,500	400	99.00	39,600	360	40
2001	1,500	390	98.00	38,220	350	40
2002	1,400	365	84.00	30,660	320	45
2003	( <sup>2</sup> )	320	102.00	32,640	290	30

<sup>1</sup> All sheep beginning January 1, 1996 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.

<sup>2</sup> Data not available until 2004.

## Breeding Sheep and Lambs and Lamb Crop: Inventory by Class Utah, January 1, 1996-2003

Year	Breeding Sheep and Lambs				Lamb Crop <sup>1</sup>	
	Total	Sheep 1 yr old and older		Replacement Lambs	Number	As Percent of Ewes One Year and Older <sup>2</sup>
		Ewes	Rams			
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Percent</i>
1996	400	340	11	49	380	112
1997	395	335	11	49	370	110
1998	380	320	10	50	350	109
1999	360	305	10	45	330	108
2000	360	310	11	39	330	106
2001	350	300	11	39	305	102
2002	320	275	9	36	305	111
2003	290	250	9	31	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Lamb crop defined as lambs marked, docked, or branded.

<sup>2</sup> 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.

<sup>3</sup> Data not available until 2004.

## Market Sheep and Lambs: Inventory by Weight Group, Utah, January 1, 1997-2003

Year	Market Lambs					Market Sheep	Total Market Sheep and Lambs
	Under 65 Lbs	65-84 Lbs	85-105 Lbs	Over 105 Lbs	Total		
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>
1997	1.00	4.00	19	13	37	8	45
1998	1.00	2.00	14	15	32	8	40
1999	1.00	3.00	10	19	33	7	40
2000	3.00	2.00	10	20	35	5	40
2001	3.00	2.00	14	16	35	5	40
2002	1.00	3.00	15	23	42	3	45
2003	0.20	0.30	8	21	29	1	30

## Sheep and Lambs: Balance Sheet, Utah, 1995-2002

Year	Inventory Beginning of Year <sup>1</sup>	Lamb Crop	Inshipments	Marketings <sup>2</sup>		Farm Slaughter <sup>3</sup>	Deaths		Inventory End of Year <sup>1</sup>
				Sheep	Lambs		Sheep	Lambs	
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>
1995	470	395	12	37	330	6	16	28	460
1996	460	380	12	38	320	6	20	28	440
1997	440	370	9	50	305	5	16	23	420
1998	420	350	9	51	286	5	16	21	400
1999	400	330	9	24	266	5	18	26	400
2000	400	330	9	32	269	5	18	25	390
2001	390	305	7	51	241	5	17	23	365
2002	365	305	6	48	42	5	15	21	320

<sup>1</sup> Beginning and end of year inventories includes new crop lambs.

<sup>2</sup> Includes custom slaughter for use on farms where produced, and State outshipments, but excludes interfarm sales within the State.

<sup>3</sup> Excludes custom slaughter for farmers at commercial establishments.

## Sheep & Lambs: Production, Marketings & Income 1995-2002

Year	Production <sup>1</sup>	Marketings <sup>2</sup>	Price per 100 Pounds		Value of Production	Cash Receipts <sup>3</sup>	Value of Home Consumption	Gross Income
			Sheep	Lambs				
	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>
1995	32,808	34,980	21.00	77.00	23,017	23,827	764	24,591
1996	31,840	34,320	23.90	85.90	24,646	25,947	750	26,697
1997	31,955	34,770	32.70	87.20	25,165	26,232	667	26,899
1998	30,445	33,210	27.00	67.80	18,538	19,395	521	19,916
1999	27,545	27,360	24.70	73.80	18,337	18,424	561	18,985
2000	27,300	28,830	28.20	82.90	20,892	21,274	631	21,905
2001	25,350	29,160	27.10	61.00	14,345	15,194	472	15,666
2002	23,050	28,350	25.40	75.60	15,794	17,818	575	18,393

<sup>1</sup> Adjustments made for changes in inventory and for inshipments.

<sup>2</sup> Excludes custom slaughter for use on farms where produced and interfarm sales within the State.

<sup>3</sup> Receipt from marketings and sale of farm slaughter.

## Wool: Production and Value, Utah, 1995-2002

Year	Sheep & Lambs Shorn <sup>1</sup>	Weight per Fleece	Shorn Wool Production	Average Price per Pound	Value <sup>2</sup>
	<i>1,000 Head</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>1,000 Dollars</i>
1995	364	9.6	3,500	1.01	3,535
1996	358	9.2	3,300	0.65	2,145
1997	344	9.3	3,213	0.75	2,410
1998	337	9.4	3,157	0.62	1,957
1999	320	9.4	3,010	0.32	963
2000	320	9.6	3,060	0.22	673
2001	295	9.5	2,800	0.29	812
2002	280	9.5	2,650	0.60	1,590

<sup>1</sup> Includes shearing at commercial feeding yards.

<sup>2</sup> Production multiplied by annual average price.



## Losses of Sheep and Lambs Combined, by Cause: Utah, 1997-2002 <sup>1</sup>

Cause of Loss	1997	1998	1999	2000	2001	2002
Number of Head						
Bear	2,600	2,700	2,600	2,300	2,900	2,800
Bobcat	300	700	800	700	700	900
Coyote	24,600	21,700	21,100	21,700	22,500	19,800
Dog	2,300	2,100	2,300	2,800	1,100	1,500
Fox	1,000	900	800	1,300	1,200	1,000
Mountain Lion	7,000	6,200	4,600	6,400	4,200	4,700
Ravens/Wolves <sup>2</sup>			100	100	100	300
Eagle	400	1,100	800	1,000	1,200	1,400
Other/Unknown	3,900	4,100	3,200	1,200	2,300	1,400
<b>Total Predators</b>	<b>42,100</b>	<b>39,500</b>	<b>36,300</b>	<b>37,500</b>	<b>36,200</b>	<b>33,800</b>
Diseases	5,800	5,300	7,400	3,400	4,100	3,400
Weather Conditions	5,800	6,900	4,200	4,400	3,400	5,200
Lambing Complications	5,200	5,100	4,200	3,900	3,100	2,500
Old Age	2,400	2,700	2,800	2,000	2,300	1,900
On Back	900	700	700	400	200	300
Poison	2,600	2,300	1,200	3,800	2,100	1,300
Theft	400	200	300	200	100	300
Other/Unknown	11,300	10,700	8,400	7,400	8,500	6,300
<b>Total Non-Predators</b>	<b>34,400</b>	<b>33,900</b>	<b>29,200</b>	<b>25,500</b>	<b>23,800</b>	<b>21,200</b>
<b>Total Losses</b>	<b>76,500</b>	<b>73,400</b>	<b>65,500</b>	<b>63,000</b>	<b>60,000</b>	<b>55,000</b>

Percent of Total by Cause						
Bear	3.4	3.7	4.0	3.7	4.8	5.1
Bobcat	0.4	1.0	1.2	1.1	1.2	1.6
Coyote	32.2	29.6	32.2	34.4	37.5	36.0
Dog	3.0	2.9	3.5	4.4	1.8	2.7
Fox	1.3	1.2	1.2	2.1	2.0	1.8
Mountain Lion	9.2	8.4	7.0	10.2	7.0	8.5
Ravens/Wolves <sup>2</sup>			0.2	0.2	0.2	0.5
Eagle	0.5	1.5	1.2	1.6	2.0	2.5
Other/Unknown	5.1	5.6	4.9	1.9	3.8	2.5
<b>Total Predators</b>	<b>55.0</b>	<b>53.8</b>	<b>55.4</b>	<b>59.5</b>	<b>60.3</b>	<b>61.5</b>
Diseases	7.6	7.2	11.3	5.4	6.8	6.2
Weather Conditions	7.6	9.4	6.4	7.0	5.7	9.5
Lambing Complications	6.8	6.9	6.4	6.2	5.2	4.5
Old Age	3.1	3.7	4.3	3.2	3.8	3.5
On Back	1.2	1.0	1.1	0.6	0.3	0.5
Poison	3.4	3.1	1.8	6.0	3.5	2.4
Theft	0.5	0.3	0.5	0.3	0.2	0.5
Other/Unknown	14.8	14.6	12.8	11.7	14.2	11.5
<b>Total Non-Predators</b>	<b>45.0</b>	<b>46.2</b>	<b>44.6</b>	<b>40.5</b>	<b>39.7</b>	<b>38.5</b>
<b>Total Losses</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Dollar Value of Losses by Cause (000)						
Bear	211	189	176	145	160	157
Bobcat	22	39	42	37	35	42
Coyote	1,656	1,295	1,181	1,204	1,192	1,039
Dog	188	174	134	178	65	95
Fox	52	42	36	65	56	41
Mountain Lion	490	403	278	394	230	254
Ravens/Wolves <sup>2</sup>			5	5	4	17
Eagle	21	51	37	47	52	57
Other/Unknown	259	260	203	66	117	67
<b>Total Predators</b>	<b>2,899</b>	<b>2,453</b>	<b>2,092</b>	<b>2,141</b>	<b>1,911</b>	<b>1,770</b>
Diseases	409	348	470	216	247	182
Weather Conditions	339	384	220	220	160	256
Lambing Complications	396	364	277	244	160	140
Old Age	276	297	288	188	201	168
On Back	97	71	61	38	17	22
Poison	216	189	100	334	148	82
Theft	28	22	19	14	9	22
Other/Unknown	826	682	493	403	486	325
<b>Total Non-Predators</b>	<b>2,587</b>	<b>2,357</b>	<b>1,928</b>	<b>1,657</b>	<b>1,428</b>	<b>1,196</b>
<b>Total Losses</b>	<b>5,486</b>	<b>4,810</b>	<b>4,020</b>	<b>3,798</b>	<b>3,339</b>	<b>2,966</b>

<sup>1</sup> Lamb losses include both before and after docking losses. <sup>2</sup> 1997, 1998, 2000 are Wolves. 1999 is Ravens.

## Losses of Sheep by Cause: Utah, 1997-2002

Cause of Loss	1997	1998	1999	2000	2001	2002
Number of Head						
Bear	1,200	1,000	1,000	800	800	900
Bobcat	100	100	100	100	100	100
Coyote	6,000	4,500	3,800	4,000	5,000	4,800
Dog	1,100	1,200	500	1,000	400	700
Fox				100	100	
Mountain Lion	2,000	1,800	1,200	2,000	1,100	1,300
Ravens/Wolves <sup>1</sup>						100
Eagle						
Other/Unknown	900	1,100	1,000	200	400	200
<b>Total Predators</b>	<b>11,300</b>	<b>9,700</b>	<b>7,600</b>	<b>8,200</b>	<b>7,900</b>	<b>8,100</b>
Diseases	1,700	1,600	2,300	1,200	1,600	900
Weather Conditions	600	1,000	500	300	300	900
Lambing Complications	2,000	2,000	1,500	1,300	600	800
Old Age	2,400	2,700	2,800	2,000	2,300	1,900
On Back	800	600	500	400	200	200
Poison	1,300	1,300	800	3,300	1,300	600
Theft	100	200	100	100	100	200
Other/Unknown	3,800	2,900	1,900	1,200	2,700	1,400
<b>Total Non-Predators</b>	<b>12,700</b>	<b>12,300</b>	<b>10,400</b>	<b>9,800</b>	<b>9,100</b>	<b>6,900</b>
<b>Total Losses</b>	<b>24,000</b>	<b>22,000</b>	<b>18,000</b>	<b>18,000</b>	<b>17,000</b>	<b>15,000</b>

Percent of Total by Cause						
Bear	5.0	4.5	5.6	4.4	4.7	6.0
Bobcat	0.4	0.5	0.6	0.6	0.6	0.7
Coyote	25.0	20.5	21.1	22.2	29.4	32.0
Dog	4.6	5.5	2.8	5.6	2.4	4.7
Fox				0.6	0.6	
Mountain Lion	8.3	8.2	6.7	11.1	6.5	8.7
Ravens/Wolves <sup>1</sup>						
Eagle						
Other/Unknown	3.8	5.0	5.6	1.1	2.4	1.3
<b>Total Predators</b>	<b>47.1</b>	<b>44.1</b>	<b>42.2</b>	<b>45.6</b>	<b>46.5</b>	<b>54.0</b>
Diseases	7.1	7.3	12.8	6.7	9.4	6.0
Weather Conditions	2.5	4.5	2.8	1.7	1.8	6.0
Lambing Complications	8.3	9.1	8.3	7.2	3.5	5.3
Old Age	10.0	12.3	15.6	11.1	13.5	12.7
On Back	3.3	2.7	2.8	2.2	1.2	1.3
Poison	5.4	5.9	4.4	18.3	7.6	4.0
Theft	0.4	0.9	0.6	0.6	0.6	1.3
Other/Unknown	15.8	13.2	10.6	6.7	15.9	9.3
<b>Total Non-Predators</b>	<b>52.9</b>	<b>55.9</b>	<b>57.8</b>	<b>54.4</b>	<b>53.5</b>	<b>46.0</b>
<b>Total Losses</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Dollar Value of Losses by Cause (000)						
Bear	138	110	103	75	70	80
Bobcat	12	11	10	9	9	9
Coyote	690	495	391	377	436	425
Dog	126	132	52	94	35	62
Fox				9	9	
Mountain Lion	230	198	123	188	96	115
Ravens/Wolves <sup>1</sup>						9
Eagle						
Other/Unknown	103	121	103	19	35	18
<b>Total Predators</b>	<b>1,299</b>	<b>1,067</b>	<b>782</b>	<b>771</b>	<b>689</b>	<b>717</b>
Diseases	196	176	237	113	140	80
Weather Conditions	69	110	51	28	26	80
Lambing Complications	230	220	154	122	52	71
Old Age	276	297	288	188	201	168
On Back	92	66	52	38	17	18
Poison	149	143	82	311	113	53
Theft	12	22	10	9	9	18
Other/Unknown	437	319	196	113	235	124
<b>Total Non-Predators</b>	<b>1,461</b>	<b>1,353</b>	<b>1,070</b>	<b>922</b>	<b>794</b>	<b>610</b>
<b>Total Losses</b>	<b>2,760</b>	<b>2,420</b>	<b>1,852</b>	<b>1,693</b>	<b>1,483</b>	<b>1,327</b>

<sup>1</sup> 1997, 1998, 2000 are Wolves. 1999 is Ravens.

## Losses of All Lambs by Cause: Utah, 1997-2002 <sup>1</sup>

Cause of Loss	1997	1998	1999	2000	2001	2002
Number of Head						
Bear	1,400	1,700	1,600	1,500	2,100	1,900
Bobcat	200	600	700	600	600	800
Coyote	18,600	17,200	17,300	17,700	17,500	15,000
Dog	1,200	900	1,800	1,800	700	800
Fox	1,000	900	800	1,200	1,100	1,000
Mountain Lion	5,000	4,400	3,400	4,400	3,100	3,400
Ravens/Wolves <sup>2</sup>			100	100	100	200
Eagle	400	1,100	800	1,000	1,200	1,400
Other/Unknown	3,000	3,000	2,200	1,000	1,900	1,200
<b>Total Predators</b>	<b>30,800</b>	<b>29,800</b>	<b>28,700</b>	<b>29,300</b>	<b>28,300</b>	<b>25,700</b>
Diseases	4,100	3,700	5,100	2,200	2,500	2,500
Weather Conditions	5,200	5,900	3,700	4,100	3,100	4,300
Lambing Complications	3,200	3,100	2,700	2,600	2,500	1,700
Old Age						
On Back	100	100	200			100
Poison	1,300	1,000	400	500	800	700
Theft	300		200	100		100
Other/Unknown	7,500	7,800	6,500	6,200	5,800	4,900
<b>Total Non-Predators</b>	<b>21,700</b>	<b>21,600</b>	<b>18,800</b>	<b>15,700</b>	<b>14,700</b>	<b>14,300</b>
<b>Total Losses</b>	<b>52,500</b>	<b>51,400</b>	<b>47,500</b>	<b>45,000</b>	<b>43,000</b>	<b>40,000</b>

Percent of Total by Cause						
Bear	2.7	3.3	3.4	3.3	4.9	4.8
Bobcat	0.4	1.2	1.5	1.3	1.4	2.0
Coyote	35.4	33.5	36.4	39.3	40.7	37.5
Dog	2.3	1.8	3.8	4.0	1.6	2.0
Fox	1.9	1.8	1.7	2.7	2.6	2.5
Mountain Lion	9.5	8.6	7.2	9.8	7.2	8.5
Ravens/Wolves <sup>2</sup>			0.2	0.2	0.2	0.5
Eagle	0.8	2.1	1.7	2.2	2.8	3.5
Other/Unknown	5.7	5.8	4.6	2.2	4.4	3.0
<b>Total Predators</b>	<b>58.7</b>	<b>58.0</b>	<b>60.4</b>	<b>65.1</b>	<b>65.8</b>	<b>64.3</b>
Diseases	7.8	7.2	10.7	4.9	5.8	6.3
Weather Conditions	9.9	11.5	7.8	9.1	7.2	10.8
Lambing Complications	6.1	6.0	5.7	5.8	5.8	4.3
Old Age						
On Back	0.2	0.2	0.4			0.3
Poison	2.5	1.9	0.8	1.1	1.9	1.8
Theft	0.6		0.4	0.2		0.3
Other/Unknown	14.3	15.2	13.7	13.8	13.5	12.3
<b>Total Non-Predators</b>	<b>41.3</b>	<b>42.0</b>	<b>39.6</b>	<b>34.9</b>	<b>34.2</b>	<b>35.8</b>
<b>Total Losses</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Dollar Value of Losses by Cause (000)						
Bear	73	79	73	70	91	78
Bobcat	10	28	32	28	26	33
Coyote	966	800	790	827	755	615
Dog	62	42	82	84	30	33
Fox	52	42	36	56	47	41
Mountain Lion	260	205	155	206	134	139
Ravens/Wolves <sup>2</sup>			5	15	4	8
Eagle	21	51	37	47	52	57
Other/Unknown	156	139	100	47	82	49
<b>Total Predators</b>	<b>1,600</b>	<b>1,386</b>	<b>1,310</b>	<b>1,370</b>	<b>1,222</b>	<b>1,053</b>
Diseases	213	172	233	103	108	102
Weather Conditions	270	274	169	192	134	176
Lambing Complications	166	144	123	122	108	70
Old Age						
On Back	5	5	9			4
Poison	67	46	18	23	35	29
Theft	16		9	5		4
Other/Unknown	389	363	297	290	250	201
<b>Total Non-Predators</b>	<b>1,126</b>	<b>1,004</b>	<b>858</b>	<b>735</b>	<b>635</b>	<b>586</b>
<b>Total Losses</b>	<b>2,726</b>	<b>2,390</b>	<b>2,168</b>	<b>2,105</b>	<b>1,856</b>	<b>1,639</b>

<sup>1</sup> Lamb losses include both before and after docking losses.

<sup>2</sup> 1999 is Ravens. All other years are wolves.

### Losses of Lambs Before Docking: Utah 1997-2002

Cause of Loss	1997	1998	1999	2000	2001	2002
Number of Head						
Bear	100	100	100	100	300	400
Bobcat	100	200	200	300	200	300
Coyote	5,000	4,000	5,300	5,400	5,200	4,700
Dog	500	300	600	600	200	200
Fox	500	400	600	700	600	600
Mountain Lion	1,100	800	500	1,100	700	600
Ravens/Wolves <sup>1</sup>			100	100	100	100
Eagle	200	600	500	800	1,000	1,300
Other/Unknown	1,600	1,200	1,000	500	1,100	1,000
<b>Total Predators</b>	<b>9,100</b>	<b>7,600</b>	<b>8,900</b>	<b>9,600</b>	<b>9,400</b>	<b>9,200</b>
Diseases	2,200	2,300	3,000	800	1,600	1,600
Weather conditions	4,100	5,200	3,200	3,000	2,700	3,900
Lambing Complications	3,200	3,100	2,700	2,600	2,500	1,700
Old Age						
On Back						
Poison	100	100			100	100
Theft						
Other/Unknown	3,800	4,100	3,700	4,000	3,700	2,500
<b>Total Non-Predators</b>	<b>13,400</b>	<b>14,800</b>	<b>12,600</b>	<b>10,400</b>	<b>10,600</b>	<b>9,800</b>
<b>TOTAL LOSSES</b>	<b>22,500</b>	<b>22,400</b>	<b>21,500</b>	<b>20,000</b>	<b>20,000</b>	<b>19,000</b>

<sup>1</sup> 1999 is Ravens. All other years are Wolves.

### Losses of Lambs After Docking: Utah 1997-2002

Cause of Loss	1997	1998	1999	2000	2001	2002
Number of Head						
Bear	1,300	1,600	1,500	1,400	1,800	1,500
Bobcat	100	400	500	300	400	500
Coyote	13,600	13,200	12,000	12,300	12,300	10,300
Dog	700	600	1,200	1,200	500	600
Fox	500	500	200	500	500	400
Mountain Lion	3,900	3,600	2,900	3,300	2,400	2,800
Ravens/Wolves <sup>1</sup>						
Eagle	200	500	300	200	200	100
Other/Unknown	1,400	1,800	1,200	500	800	200
<b>Total Predators</b>	<b>21,700</b>	<b>22,200</b>	<b>19,800</b>	<b>19,700</b>	<b>18,900</b>	<b>16,500</b>
Diseases	1,900	1,400	2,100	1,400	900	900
Weather conditions	1,100	700	500	1,100	400	400
Lambing Complications						
Old Age						
On Back	100	100	200			100
Poison	1,200	900	400	500	700	600
Theft	300		200	100		100
Other/Unknown	3,700	3,700	2,800	2,200	2,100	2,400
<b>Total Non-Predators</b>	<b>8,300</b>	<b>6,800</b>	<b>6,200</b>	<b>5,300</b>	<b>4,100</b>	<b>4,500</b>
<b>TOTAL LOSSES</b>	<b>30,000</b>	<b>29,000</b>	<b>26,000</b>	<b>25,000</b>	<b>23,000</b>	<b>21,000</b>

<sup>1</sup> 1999 is Ravens. All other years are Wolves.

# Hogs and Pigs

## Hogs and Pigs: Farms, Inventory and Value, Utah, 1995-2002

Year	Farms with Hogs	Hogs and Pigs on Farms December 1			
		Number	Value		
			Per Head	Total	
<i>Number</i>	<i>1,000 Head</i>	<i>Dollars</i>	<i>1,000 Dollars</i>		
1995	700	62	76.00	4,712	
1996	600	163	99.00	16,137	
1997	500	295	88.00	25,960	
1998	500	380	48.00	18,240	
1999	500	550	77.00	40,040	
2000	500	550	83.00	45,650	
2001	500	610	83.00	50,630	
2002	400	670	76.00	50,920	

## Hogs and Pigs: Inventory by Class and Weight Group, Utah, December 1, 1995-2002

Year	Total	Breeding	Market	Market Hogs & Pigs by Weight Group			
				Under 60 lbs	60-119 Lbs	120-179 Lbs	180 Lbs & Over
				<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>
1995	62	19	43	13	11	11	8
1996	163	33	130	52	32	32	14
1997	295	55	240	102	42	38	58
1998	380	60	320	130	60	60	70
1999	550	70	450	180	85	75	110
2000	550	80	470	190	110	100	70
2001	610	70	540	235	120	110	75
2002	670	90	580	230	120	130	100

## Hogs and Pigs: Balance Sheet, Utah, 1995-2002

Year	Inventory Beginning of year <sup>1</sup>	Annual Pig Crop	Inshipments	Marketings <sup>2</sup>	Farm Slaughter <sup>3</sup>	Deaths	Inventory End of Year <sup>1</sup>
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>
1995	44	82	15	74	1	4	62
1996	62	234	4	124	1	12	163
1997	163	436	2	272	1	33	295
1998	295	657	2	514	1	59	380
1999	380	836	16	640	1	71	550
2000	550	979	1	891	1	58	550
2001	550	1,054	8	936	1	65	610
2002	610	1,242	8	1,119	1	70	670

<sup>1</sup> Hogs and pigs inventory is as of December 1 previous year.

<sup>2</sup> Includes custom slaughter for use on farm where produced, State out-shipments, but excludes interfarm sales within the State.

<sup>3</sup> Excludes custom slaughter for farmers at commercial establishments.

## Hogs and Pigs: Production, Marketings and Income, Utah, 1995-2002

Year	Production <sup>1</sup>	Marketings <sup>2</sup>	Price per 100 Lbs	Value of Production	Cash Receipts <sup>3</sup>	Value of Home Consumption	Gross Income
	<i>1,000 Pounds</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>	<i>1,000 Dollars</i>
1995	19,405	16,570	33.80	6,347	5,629	162	5,791
1996	41,510	29,520	54.00	22,430	15,941	259	16,200
1997	84,510	65,040	58.80	49,676	38,244	282	38,526
1998	133,435	123,120	40.20	53,606	49,494	193	49,687
1999	170,690	153,360	35.30	59,936	54,136	169	54,305
2000	214,591	213,600	45.90	98,404	98,042	221	98,263
2001	227,010	224,400	47.90	108,500	107,488	230	107,718
2002	281,980	268,320	39.30	110,574	105,450	189	105,639

<sup>1</sup> Adjustments made for inshipments and changes in inventories.

<sup>2</sup> Excludes interfarm sales within the State and custom slaughter for use on farms where produced.

<sup>3</sup> Includes receipts from marketings and from sales of farm slaughtered meat.

## Pig Crop: Sows Farrowing and Pigs Saved, Utah, 1995-2002

Year	Sows Farrowing	Pigs per Litter	Pigs Saved
	<i>1,000 Head</i>	<i>Head</i>	<i>1,000 Head</i>
1995	10.1	8.12	82
1996	28.0	8.36	234
1997	50.5	8.63	436
1998	75.5	8.70	657
1999	97.0	8.62	836
2000	110.0	8.90	979
2001	117.0	9.01	1,054
2002	137.0	9.07	1,242

# Chickens and Eggs

## Layers & Eggs: Number, Production and Value of Production, Utah 1995-2002 <sup>1</sup>

Year	Average Number of Layers	Eggs per Layer <sup>2</sup>	Total Egg Production	Price per Dozen	Value of Production
	<i>1,000 Head</i>	<i>Number</i>	<i>Millions</i>	<i>Dollars</i>	<i>1,000 Dollars</i>
1995	1,950	263	513	0.471	20,135
1996	1,746	266	464	0.566	21,885
1997	1,819	266	483	0.576	23,184
1998	1,824	262	478	0.520	20,713
1999	1,913	272	521	0.443	19,234
2000	2,704	263	712	0.434	25,751
2001	3,282	264	865	0.440	31,717
2002	3,342	267	894	0.420	31,290

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

<sup>2</sup> Total egg production divided by average number of layers on hand.

## Chicken Inventory: Number and Value, Utah, December 1, 1995-2002 <sup>1</sup>

Year	Layers			Pullets not of laying age		Other Chickens	Total Chickens	Value		
	Layers one year old and older	Layers 20 weeks old but less than one year	Total	Pullets 13 weeks old and older but less than 20 weeks	Pullet Chicks and Pullets under 13 weeks of age			Number	Average	Total
									<i>Dollars</i>	<i>1,000 Dollars</i>
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>Dollars</i>	<i>1,000 Dollars</i>	
1995	920	790	1,710	150	179	1	2,040	1.30	2,652	
1996	895	839	1,734	141	168	1	2,044	1.50	3,066	
1997	939	759	1,698	244	196		2,138	1.60	3,421	
1998	1,000	830	1,830	268	98		2,196	1.60	3,514	
1999	974	1,320	2,294	245	345		2,884	1.40	4,038	
2000	1,832	1,343	3,175	261	390	2	3,828	1.80	6,890	
2001	1,724	1,788	3,512	151	350	2	4,015	1.30	5,220	
2002	1,781	1,571	3,352	407	93	1	3,853	1.70	6,550	

<sup>1</sup> Excludes commercial broilers.

## Chicken: Lost, Sold, and Value of Sales, Utah, 1995-2002 <sup>1</sup>

Year	Number Lost <sup>2</sup>	Number Sold	Pounds Sold	Price per Pound	Value of Sales
	<i>1,000 Head</i>	<i>1,000 Head</i>	<i>1,000 Pounds</i>	<i>Dollars</i>	<i>1,000 Dollars</i>
1995	372	1,298	5,192	0.026	135
1996	327	1,014	4,056	0.030	122
1997	250	1,068	4,272	0.030	128
1998	164	1,021	4,084	0.030	123
1999	177	1,116	4,464	0.033	147
2000	198	1,088	4,352	0.020	87
2001	272	1,499	5,247	0.001	5
2002	260	2,003	7,812	0.010	78

<sup>1</sup> Estimates exclude broilers and cover the 12 month period December 1 previous year through November 30.

<sup>2</sup> Includes death and other losses during the 12 month period.

# Bees, Honey & Mink

## Honey: Colonies of Bees, Production, & Value, Utah 1995-2002

Year	Honey Producing Colonies	Honey			
		Production		Value of Production	
		Yield per Colony	Total	Average Price per Pound	Total
	<i>1,000</i>	<i>Pounds</i>	<i>1,000 Pounds</i>	<i>Cents</i>	<i>1,000 Dollars</i>
1995	32	33	1,056	65	686
1996	34	46	1,564	85	1,329
1997	32	52	1,664	75	1,248
1998	30	58	1,740	65	1,131
1999	26	45	1,170	68	796
2000	24	41	984	60	590
2001	23	38	874	65	568
2002	22	59	1,298	129	1,674

## Mink: Number of Ranches, Pelts Produced, Females Bred, Average Price & Value, Utah and United States, 1995-2002

Year	Utah			United States				
	Ranches Producing Pelts	Pelts Produced	Females Bred	Ranches Producing Pelts	Pelts Produced	Females Bred	Average Marketing Price	Value of Pelts
	<i>Number</i>	<i>1,000</i>	<i>1,000</i>	<i>Number</i>	<i>1,000</i>	<i>1,000</i>	<i>Dollars</i>	<i>Million Dollars</i>
1995	130	570	162	478	2,803.1	727.9	53.10	148.8
1996	130	585	167	449	2,783.2	703.1	35.30	98.2
1997	125	670	185	452	2,993.3	749.7	33.10	99.1
1998	115	675	175	439	2,938.2	733.3	24.80	72.9
1999	110	650	156	398	2,812.5	672.7	33.70	94.8
2000	90	590	163	350	2,666.1	664.9	34.00	90.6
2001	80	610	145	329	2,565.3	629.5	33.50	85.9
2002	80	575	149	318	2,600.4	620.5	30.60	79.6

## Mink: Pelts Produced in 2002 and Females Bred for 2003, by Type, Utah and United States

Type	Pelts Produced 2002		Females Bred To Produce Kits 2003	
	Utah	United States	Utah	United States
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
Black <sup>2</sup>	200,000	965,100	56,200	255,000
Demi/Wild <sup>3</sup>	( <sup>1</sup> )	149,600	( <sup>1</sup> )	31,300
Pastel	( <sup>1</sup> )	32,500	( <sup>1</sup> )	8,200
Sapphire <sup>4</sup>	24,000	182,000	6,100	38,400
Blue Iris <sup>5</sup>	39,000	514,800	6,000	100,800
Mahogany	231,000	563,500	48,300	118,100
Pearl	( <sup>1</sup> )	88,000	( <sup>1</sup> )	20,100
Lavender <sup>6</sup>	4,000	9,800	( <sup>1</sup> )	1,100
Violet	( <sup>1</sup> )	11,500	( <sup>1</sup> )	7,100
White	( <sup>1</sup> )	75,100	( <sup>1</sup> )	19,300
Miscellaneous <sup>7</sup>	( <sup>1</sup> )	8,500	( <sup>1</sup> )	1,600
Total	575,000	2,600,400	135,000	601,000

<sup>1</sup> Not published to avoid disclosure of individual operations.

<sup>2</sup> Black - formerly Standard, includes Pure Dark

<sup>3</sup> Demi/Wild - includes Dark brown, Ranch Wild, Demi-buff

<sup>4</sup> Sapphire - includes Pale Brown

<sup>5</sup> Blue Iris - for Gunmetal, includes Aleutian

<sup>6</sup> Lavender - formerly Lavender Hope

<sup>7</sup> Miscellaneous - Includes Pink



# Trout

## Trout: Number of Operations, Total Value of Fish Sold, and Foodsize Sales, Utah, 1997-2002

Year	Total Number of Operations	Total Value of Fish Sold	Foodsize (12 inches or longer)			
			Number of Fish	Live Weight	Sales	
					Total	Average per pound
	<i>Number</i>	<i>1,000 Dollars</i>	<i>Thousands</i>	<i>Thousands</i>	<i>1,000 Dollars</i>	<i>Dollars</i>
1997	17	2,325	556	871	1,816	2.08
1998	17	1,871	420	465	1,353	2.91
1999	15	1,697	740	656	1,220	1.86
2000	25	1,396	400	464	858	1.85
2001	26	1,324	720	705	1,114	1.58
2002	23	1,081	470	496	893	1.80

## Trout: Stocker Sales and Fingerling Sales, Utah, 1997-2002

Year	Stocker (6 inches - 12 inches)				Fingerlings (1 inch - 6 inches)			
	Number of Fish	Live Weight	Sales		Number of Fish	Live Weight	Sales	
			Total	Average per pound			Total	Average per 1,000 Fish/eggs <sup>1</sup>
	<i>1,000</i>	<i>1,000 Pounds</i>	<i>1,000 Dollars</i>	<i>Dollars</i>	<i>1,000</i>	<i>1,000 Pounds</i>	<i>1,000 Dollars</i>	<i>Dollars</i>
1997	543	279	487	1.75	73	4	22	5.50
1998	490	310	505	1.63	100	5	13	132.00
1999	540	250	450	1.80	115	7	27	235.00
2000	460	231	467	2.02	630	38	71	113.00
2001	170	85	178	2.09	210	10	32	151.00
2002	260	74	181	2.44	36	1	7	196.00

<sup>1</sup> Data prior to 1998 was "Average Value per Pound".

## Trout Lost, Intended for Sale: Number, Pounds, and Percent by Cause, Utah, 1997-2002<sup>1</sup>

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
	<i>1,000</i>	<i>1,000</i>	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>
1997	249	97				36	22	14	45	20	18
1998	351	105	32	3	9	3	2	1	50	50	14
1999	75	33	10	2	13						
2000	68	17				3	2	4			
2001	183	27									
2002	392	90									

<sup>1</sup> Some data are not published to avoid disclosure of individual operations.

## Trout Lost, Intended for Sale: Number, Pounds, and Percent by Cause, Utah, 1997-2002<sup>1</sup> (continued)

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
	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>	<i>1,000</i>	<i>1,000</i>	<i>Percent</i>
1997				8	3	3	133	43	53	27	9	11
1998	1	1		1	1		204	47	58	60	1	17
1999							57	22	76			
2000							48	10	71			
2001							119	13	65			
2002	113	68	29				62	7	16	17	13	4

<sup>1</sup> Some data are not published to avoid disclosure of individual operations.

# Agricultural Prices - Paid & Received

## Farm Labor: Number Hired, Wage Rates, & Hours Worked, Mountain II Region, July 2002, October 2002, January 2003, and April 2003 <sup>1 2</sup>

	July 2002	October 2002	January 2003	April 2003
<b>Hired Workers (1,000 employees)</b>				
Hired workers	19	16	20	22
Expected to be employed				
150 days or more	13	10	18	16
149 days or less	6	6	2	6
<b>Hours Worked (per week)</b>				
Hours worked by hired workers	41.6	35.7	39.7	39.1
<b>Wage Rates (dollars per hours)</b>				
Wage rates for all hired workers <sup>2</sup>	7.82	8.79	9.66	9.43
Type of worker				
Field	7.23	8.31	9.15	8.32
Livestock	7.35	8.79	8.73	8.86
Field & Livestock combined	7.27	8.50	8.85	8.60

<sup>1</sup> Mountain II Region includes Colorado, Nevada, and Utah.

<sup>2</sup> Excludes Agricultural Service workers.

## Grazing Fee Annual Average Rates, Utah, 1995 - 2002

Year	Per Animal Unit <sup>1</sup>	Cow-Calf	Per Head
	<i>Dollars Per Month</i>	<i>Dollars Per Month</i>	<i>Dollars Per Month</i>
1995	9.50	10.00	11.80
1996	9.75	11.00	11.00
1997	9.00	11.10	11.00
1998	10.00	11.30	11.10
1999	10.00	12.10	11.10
2000	10.80	13.10	11.30
2001	11.00	14.00	12.00
2002	11.60	13.70	12.10

<sup>1</sup> Includes animal unit plus Cow-calf rate converted to animal unit (AUM) using (1 aum=cow-calf \* 0.833)

## Average Prices Received: by Farmers, Utah, 1995-2002

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mktg Year Avg <sup>1</sup>
<b>Barley (Dollars per Bushel)</b>													
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	2.29
1998	2.34	2.34	2.29	2.37	2.15	2.14	1.96	1.86	1.76	1.73	1.79	1.83	1.86
1999	1.87	1.93	1.95	1.90	1.83	1.93	1.83	1.85	1.84	1.81	1.87	1.90	1.89
2000	2.05	1.97	1.89	2.02	2.04	1.92	1.95	2.01	1.80	1.89	1.88	2.12	2.00
2001	2.10	2.10	2.14	2.13	2.28	1.92	2.02	2.03	2.04	2.11	1.99	2.22	2.14
2002	2.30	2.28	2.34	2.29	2.27	2.34	2.15	2.27	2.46	2.43	2.45	2.56	2.35
<b>Alfalfa &amp; Alfalfa Hay Mixtures, Baled (Dollars per Ton)</b>													
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	89.00	84.00	84.00	85.00	86.00	85.00	85.00
1998	84.00	80.00	81.00	78.00	77.00	76.00	81.00	81.00	80.00	78.00	79.00	75.00	77.00
1999	75.00	76.00	66.00	64.00	62.00	63.00	71.00	74.00	74.00	77.00	77.00	76.00	73.00
2000	73.00	73.00	71.00	68.00	68.00	64.00	74.00	84.00	82.00	82.00	82.00	82.00	79.50
2001	82.00	86.00	87.00	85.00	93.00	96.00	100.00	98.00	97.00	98.00	97.00	98.00	97.00
2002	94.00	97.00	95.00	92.00	88.00	96.00	94.00	106.00	99.00	97.00	97.00	94.00	97.50
<b>All Hay, Baled (Dollars per Ton)</b>													
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	88.00	83.00	84.00	85.00	86.00	85.00	84.00
1998	83.00	79.00	80.00	78.00	77.00	76.00	81.00	80.00	79.00	77.00	77.00	74.00	76.00
1999	74.00	74.00	65.00	62.00	61.00	63.00	70.00	73.00	73.00	76.00	75.00	74.00	71.50
2000	73.00	71.00	69.00	63.00	67.00	64.00	73.00	82.00	81.00	81.00	81.00	82.00	78.50
2001	81.00	86.00	85.00	84.00	93.00	95.00	98.00	95.00	95.00	96.00	95.00	96.00	95.00
2002	92.00				88.00			103.00	97.00	95.00		92.00	95.50
<b>Sheep (Dollars per Cwt)</b>													
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
1998	40.00	37.00	37.00	37.00	35.00	29.00	26.00	26.00	20.00	20.00	21.00	25.00	27.00
1999	27.00	27.00	27.00	25.00	25.00	24.00	28.00	22.00	24.00	20.00	25.00	29.00	24.70
2000	29.00	36.00	32.00	32.00	24.00	27.00	31.00	24.00	25.00	25.00	30.00	33.00	28.20
2001	36.00	39.00	37.00	31.00	29.00	25.00	26.00	24.00	25.00	22.00	26.00	33.00	27.10
2002	32.00	33.00	32.00	26.00	22.00	22.00	23.00	23.00	23.00	24.00	30.00	33.00	25.40
<b>Lambs (Dollars per Cwt)</b>													
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
1998	77.00	76.00	71.00	70.00	70.00	82.00	78.00	78.00	68.00	62.00	59.00	65.00	67.80
1999	69.00	63.00	65.00	73.00	80.00	78.00	76.00	76.00	73.00	70.00	79.00	82.00	73.80
2000	84.00	86.00	90.00	90.00	100.00	85.00	83.00	83.00	82.00	75.00	70.00	75.00	82.90
2001	80.00	80.00	85.00	89.00	83.00	75.00	66.00	56.00	57.00	52.00	55.00	64.00	61.00
2002	70.00	70.00	68.00	67.00	66.00	71.00	74.00	71.00	73.00	78.00	82.00	86.00	75.60

<sup>1</sup> Marketing year, barley, July 1 to June 30; hay, May 1 to April 30; sheep and lamb, January 1 to Dec 31.

### Average Prices Received: by Farmers, Utah, 1995-2002

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Mktg Year Avg
<b>Milk, All (Dollars per Cwt)</b>													
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
1998	13.80	14.00	13.10	12.90	12.50	13.10	13.30	14.60	15.90	16.70	17.10	17.60	15.40
1999	17.80	15.00	15.10	12.10	12.50	12.60	13.00	13.60	15.60	14.40	14.00	11.80	13.90
2000 <sup>1</sup>													11.20
2001													14.70
2002													11.80
<b>Milk, Eligible for Fluid Market (Dollars per Cwt)<sup>2</sup></b>													
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
1998	13.80	14.00	13.10	13.00	12.70	13.10	13.30	14.70	16.00	16.70	17.10	17.70	15.40
1999	18.00	15.20	15.30	12.20	12.60	12.70	13.00	13.50	15.70	14.50	14.30	11.90	14.00
2000 <sup>1</sup>													11.20
2001													14.70
2002													11.80
<b>Milk, Manufacturing Grade (Dollars per Cwt)</b>													
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
1998	13.00	13.20	12.40	11.80	10.90	12.40	13.80	14.60	15.20	16.50	17.10	17.30	14.00
1999	15.80	13.10	12.10	11.80	11.30	11.40	12.40	14.80	15.00	12.80	10.60	10.40	12.60
2000 <sup>1</sup>													10.30
2001													13.10
2002													11.00

<sup>1</sup> Monthly estimates for Utah were discontinued in 2000.

<sup>2</sup> Includes surplus diverted to manufacturing.

### Average Prices Received: by Farmers, Milk Cows, Utah 1995-2002

Year	January	April	July	October	Marketing Year Average
	<i>Dollars per Head</i>	<i>Dollars per Head</i>	<i>Dollars per Head</i>	<i>Dollars per Head</i>	<i>Dollars per Head</i>
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
1998	1,050	1,100	1,140	1,160	1,110
1999	1,160	1,200	1,230	1,300	1,220
2000 <sup>1</sup>					1,220
2001					1,450
2002					1,550

<sup>1</sup> Monthly estimates for Utah were discontinued in 2000.

# 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.

County estimates may be downloaded in .CSV file format by accessing the NASS homepage at <http://www.usda.gov/nass> and selecting "On-line DATA BASE" or "Anonymous FTP". ("Anonymous FTP" gives the user more versatility in selecting multiple years and commodities.)

Box Elder was the "Number one" county in **total grain production** (wheat, barley, oats, and corn) followed by Cache, Millard, Utah, and Davis Counties. These five counties accounted for 71 percent of the 2002 grain production. Box Elder was also "number one" in **acres of small grain planted** (wheat, barley, oats) followed by Cache, Utah, San Juan, and Millard Counties. These five counties accounted for 64 percent of the 2002 small grain acreage.

Box Elder County was the State's largest producer of **winter wheat** producing 59 percent of the State total. Cache County ranked second followed by Utah, Davis and Millard Counties.

**Other 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 Millard, Box Elder, Utah, and Sanpete County.

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

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

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

Cattle and sheep are in different locations (including counties and states) at different times of the year. The January 1 cattle and sheep county estimates include the livestock in the county where the headquarters ranch is located.

Box Elder County had the largest inventory of **cattle and calves** as of January 1, 2003 followed by Cache, Millard, Utah, and Duchesne. Cache County continued as the major county for **milk cows** with almost twice the number as Millard which ranked in second place. Box Elder, Utah, and Sanpete were also major dairy counties.

Sanpete was once again the "Number one" **sheep** county. Other major sheep producing counties were Box Elder, Summit, Iron and Utah. The top five counties accounted for 63 percent of the total.

Beaver County was the "Number one" 2002 **total cash receipts** county. Box Elder was second followed by Cache, Davis and Carbon. Beaver was the leading county for **livestock cash receipts** followed by Box Elder, Cache, Davis and Carbon. **Crops cash receipts** were topped by Beaver County followed by Box Elder, Cache, Davis and Carbon counties.

## County Estimates: by County, Selected Items and Years, Utah <sup>1</sup>

Item	Unit	State	County					
			Beaver	Box Elder	Cache	Carbon	Daggett	Davis
<b>2002 Production</b>								
All Wheat	Bu	4,892,000		2,518,200	648,300			267,300
All Barley	Bu	2,880,000	73,800	321,000	630,800			64,100
Corn for Grain	Bu	2,030,000		539,000	29,000			177,600
Corn for Silage	Tons	800,000	19,600	149,500	135,500	8,000		20,700
Oats	Bu	450,000	9,500	59,400	43,500			9,600
All Hay	Tons	2,286,000	112,600	243,100	207,900	16,900	9,800	29,100
Alfalfa & Alfalfa Mix Hay	Tons	2,016,000	105,600	213,200	188,100	15,400	6,800	25,500
<b>January 1, 2003 Inventory</b>								
All Cattle & Calves	Head	880,000	31,000	105,000	73,000	11,000	4,000	8,000
Beef Cows	Head	339,000	12,000	33,000	9,000	6,500	3,000	4,500
Milk Cows	Head	91,000	3,000	10,500	21,000			
Breeding Sheep & Lambs	Head	290,000		56,000	4,200	5,800		2,100
<b>Cash Receipts, 2002</b>								
Livestock & Lvstk	Mill \$	807.8	107.1	69.6	83.9	5.0	1.8	5.4
Products	Mill \$	247.8	7.2	32.7	17.3	1.1	0.5	32.3
Crops	Mill \$	1,055.6	114.3	102.2	101.1	6.1	2.3	37.7
Total								
<b>1997 Census of Agriculture</b>								
Number of Farms	Num	14,181	219	1,077	1,232	199	36	559
Land in Farms	Acres	12,024,661	130,994	1,357,734	266,374	201,679	26,485	67,906
Harvested Cropland <sup>2</sup>	Acres	1,107,928	28,209	174,615	119,910	6,060	7,676	17,808
Irrigated Land <sup>3</sup>	Acres	1,212,201	35,177	137,074	93,008	10,588	7,840	21,907

See footnotes below.

## County Estimates: by County, Selected Items and Years, Utah <sup>1</sup> (continued)

Item	Unit	County						
		Duchesne	Emery	Garfield	Grand	Iron	Juab	Kane
<b>2002 Production</b>								
All Wheat	Bu					35,000		
All Barley	Bu	64,800				88,000	38,600	
Corn for Grain	Bu	144,400	71,500				14,300	
Corn for Silage	Tons	17,600	12,000			10,300	7,200	
Oats	Bu	18,800	26,700			10,000	7,900	
All Hay	Tons	154,800	55,900	34,300		234,700	55,500	11,300
Alfalfa & Alfalfa Mix Hay	Tons	133,200	49,600	29,700	9,000	225,000	51,200	9,300
<b>January 1, 2003 Inventory</b>								
All Cattle & Calves	Head	59,000	27,000	17,000	3,000	22,000	17,000	9,000
Beef Cows	Head	28,000	16,000	7,500	2,000	8,000	7,000	5,000
Milk Cows	Head	2,800				2,800		
Breeding Sheep & Lambs	Head	4,300	2,900	1,000		27,900	4,100	1,300
<b>Cash Receipts, 2002</b>								
Livestock & Lvstk	Mill \$	31.1	12.3	7.3	3.7	29.0	8.4	3.9
Products	Mill \$	8.7	3.4	1.9	1.2	16.1	7.3	0.6
Crops	Mill \$	39.8	15.7	9.2	4.8	45.0	15.7	4.6
Total								
<b>1997 Census of Agriculture</b>								
Number of Farms	Num	811	450	285	85	375	228	143
Land in Farms	Acres	1,328,307	158,798	212,381	75,801	404,574	275,632	175,384
Harvested Cropland <sup>2</sup>	Acres	56,971	20,922	14,565	3,254	53,457	29,998	3,210
Irrigated Land <sup>3</sup>	Acres	114,790	41,198	25,406	4,472	60,400	22,236	7,198

## County Estimates: by County, Selected Items and Years, Utah <sup>1</sup> (continued)

Item	Unit	County							
		Millard	Morgan	Piute	Rich	Salt Lake	San Juan	Sanpete	Sevier
<b>2002 Production</b>									
All Wheat	Bu	241,700				185,000	200,700	17,800	
All Barley	Bu	458,200	99,000		45,000	49,500		197,200	99,000
Corn for Grain	Bu	277,000				30,000			78,000
Corn for Silage	Tons	94,000				8,000		40,000	62,700
Oats	Bu	27,000	10,000		13,600	10,000	43,000	14,800	16,800
All Hay	Tons	235,600	25,800	21,000	64,500	27,200		126,600	106,200
Alfalfa & Alfalfa Mix Hay	Tons	224,200	21,200	16,800	23,100	24,700	13,600	105,000	100,000
<b>January 1, 2003 Inventory</b>									
All Cattle & Calves	Head	71,000	9,000	13,000	45,000	8,000	17,000	53,000	39,000
Beef Cows	Head	23,500	3,000	5,500	24,500	5,000	9,500	17,000	11,000
Milk Cows	Head	15,000	800	2,400				6,700	
Breeding Sheep & Lambs	Head	5,400	6,600	4,100	10,300	3,000	5,100	57,800	4,700
<b>Cash Receipts, 2002</b>									
Livestock & Lvstk	Mill \$	68.3	9.8	10.7	19.2	15.3	7.3	101.6	28.8
Products	Mill \$	17.0	1.8	1.3	3.6	13.2	3.1	8.1	6.7
Crops	Mill \$	85.3	11.5	12.0	22.9	28.5	10.4	109.8	35.5
Total									
<b>1997 Census of Agriculture</b>									
Number of Farms	Num	650	243	106	162	593	231	776	478
Land in Farms	Acres	457,823	179,246	44,540	523,744	113,912	1,673,079	359,717	147,032
Harvested Cropland <sup>2</sup>	Acres	94,530	14,696	10,934	52,983	20,319	53,772	60,783	34,169
Irrigated Land <sup>3</sup>	Acres	99,248	8,836	14,257	74,559	14,647	9,078	72,315	43,728

See footnotes below.

## County Estimates: by County, Selected Items and Years, Utah <sup>1</sup> (continued)

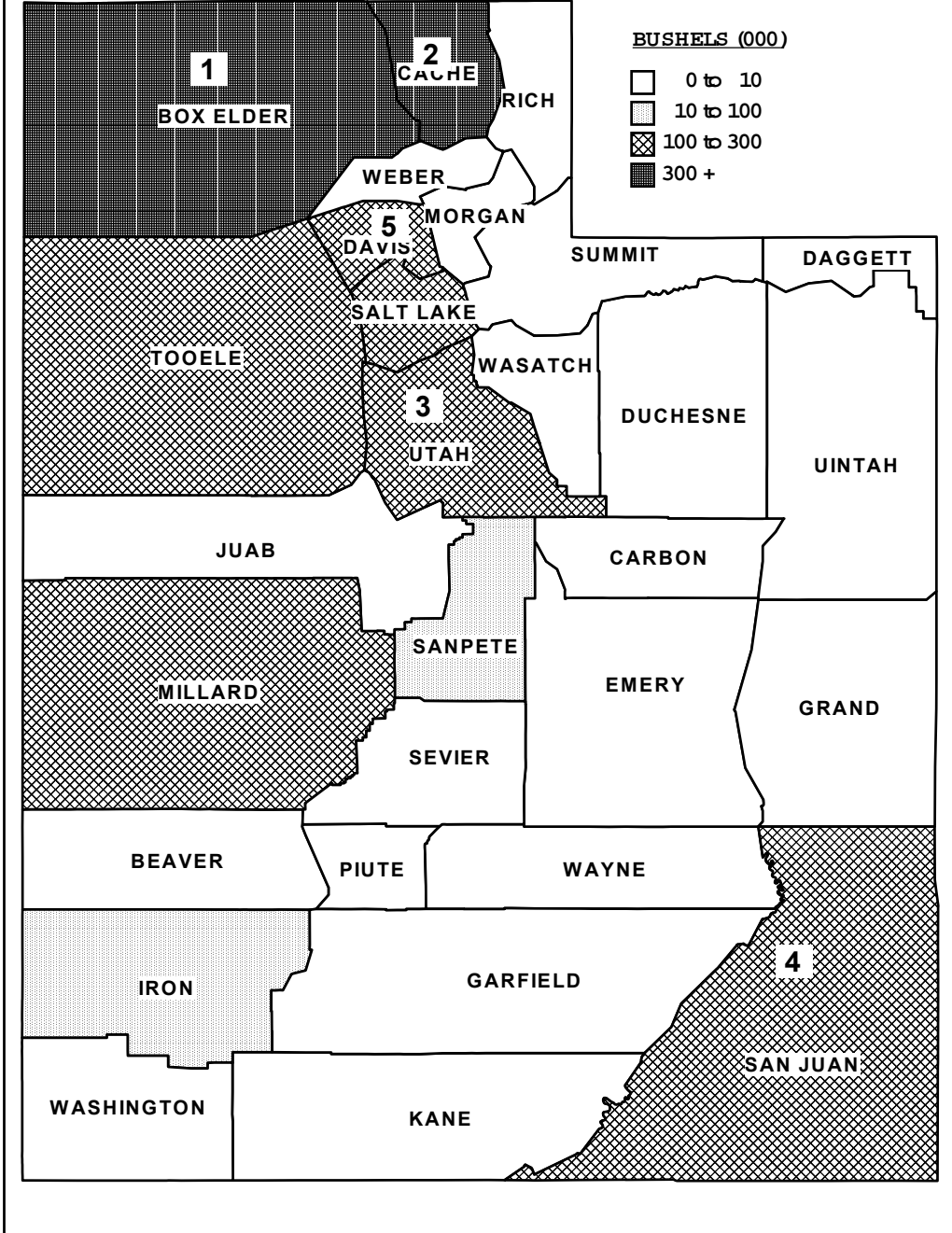
Item	Unit	County							
		Summit	Tooele	Uintah	Utah	Wasatch	Washington	Wayne	Weber
<b>2002 Production</b>									
All Wheat	Bu		103,900		281,000				
All Barley	Bu		54,000	50,400	272,500	41,400		83,000	87,800
Corn for Grain	Bu		14,000	179,400	340,700				122,400
Corn for Silage	Tons		8,000	35,900	88,100				70,800
Oats	Bu	9,700	8,200	19,200	43,500	18,600	10,000	10,500	9,700
All Hay	Tons	38,000	44,300	112,800	130,800	23,900	36,300	36,800	66,300
Alfalfa & Alfalfa Mix Hay	Tons	20,900	41,300	102,400	114,000	20,700	33,600	32,000	60,900
<b>January 1, 2003 Inventory</b>									
All Cattle & Calves	Head	29,000	27,000	44,000	65,000	11,000	17,000	21,000	25,000
Beef Cows	Head	13,500	16,000	17,500	19,500	6,000	8,500	10,500	7,000
Milk Cows	Head	1,400		1,400	9,800	1,000		1,700	4,700
Breeding Sheep & Lambs	Head	32,600	2,600	10,500	19,000	6,600		5,800	5,200
<b>Cash Receipts, 2002</b>									
Livestock & Lvstk	Mill \$	20.0	12.5	22.3	72.9	7.2	8.6	13.0	21.9
Products	Mill \$	2.1	3.3	6.7	33.8	1.9	3.8	2.5	8.6
Crops	Mill \$	22.1	15.8	29.0	106.7	9.1	12.4	15.5	30.5
Total									
<b>1997 Census of Agriculture</b>									
Number of Farms	Num	476	332	795	1,790	294	429	191	936
Land in Farms	Acres	589,528	291,746	2,268,090	374,933	106,142	163,135	59,593	81,352
Harvested Cropland <sup>2</sup>	Acres	20,435	16,966	44,954	86,916	9,295	10,321	13,667	26,473
Irrigated Land <sup>3</sup>	Acres	28,429	18,944	83,939	81,168	15,424	16,057	17,627	32,651

<sup>1</sup> This table is a recap by county of estimates published on pages 74 through 99.

<sup>2</sup> Includes land from which crops were harvested or hay was cut, and land in orchards.

<sup>3</sup> Includes all land watered by any artificial or controlled means, such as sprinklers, furrows or ditches, and spreader dikes.

# UTAH ALL WHEAT PRODUCTION By County, 2002





## County Estimates: All Wheat, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres				Harvested Yield		Production	
	Planted		Harvested		2001	2002	2001	2002
	2001	2002	2001	2002				
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	65,700	63,800	61,100	58,700	55	43	3,348,500	2,518,200
Cache	17,800	18,800	16,400	16,800	39	39	635,500	648,300
Davis	3,400	3,500	3,200	3,100	92	86	295,500	267,300
Morgan								
Rich								
Salt Lake		9,000		8,400		22		185,000
Tooele	3,700	3,500	3,100	3,100	34	34	104,500	103,900
Weber	2,600		2,500		80		200,500	
Other Counties	9,800	3,900	8,500	3,100	22	69	186,500	213,300
<b>Total</b>	103,000	102,500	94,800	93,200	50	42	4,771,000	3,936,000
<b>Central</b>								
Juab	5,800		3,600		34		121,000	
Millard	4,900	4,800	4,000	3,700	67	65	269,500	241,700
Sanpete		500		400		45		17,800
Sevier								
Utah	17,500	16,200	15,400	13,100	27	21	419,000	281,000
Other Counties	800	5,500	200	4,700	38	27	7,500	127,000
<b>Total</b>	29,000	27,000	23,200	21,900	35	30	817,000	667,500
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne								
Emery								
Grand								
San Juan	22,900	21,100	19,900	17,100	16	12	324,000	200,700
Summit								
Uintah								
Wasatch								
Other Counties	1,800	2,400	1,300	2,400	25	16	32,000	38,800
<b>Total</b>	24,700	23,500	21,200	19,500	17	12	356,000	239,500
<b>Southern</b>								
Beaver								
Garfield								
Iron		1,400		1,100		32		35,000
Kane								
Piute								
Washington								
Wayne								
Other Counties	3,300	600	1,800	300	50	47	90,000	14,000
<b>Total</b>	3,300	2,000	1,800	1,400	50	35	90,000	49,000
<b>State Total</b>	160,000	155,000	141,000	136,000	43	36	6,034,000	4,892,000

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: All Wheat, by Cropping Practice, Utah, 2001 <sup>1</sup>

District and County	Irrigated				Non-Irrigated			
	Acres		Harvested Yield	Production	Acres		Harvested Yield	Production
	Planted	Harvested			Planted	Harvested		
	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	26,200	25,200	97	2,452,000	39,500	35,900	25	896,500
Cache	6,500	6,300	65	411,500	11,300	10,100	22	224,000
Davis	2,900	2,800	102	285,500				
Morgan								
Rich								
Salt Lake					8,000	7,100	17	120,000
Tooele								
Weber	2,500	2,400	83	199,000				
Other Counties	1,900	1,700	72	123,000	4,200	3,300	18	59,500
<b>Total</b>	<b>40,000</b>	<b>38,400</b>	<b>90</b>	<b>3,471,000</b>	<b>63,000</b>	<b>56,400</b>	<b>23</b>	<b>1,300,000</b>
<b>Central</b>								
Juab					4,300	2,400	14	34,000
Millard	3,900	3,200	81	258,500	1,000	800	14	11,000
Sanpete								
Sevier								
Utah	3,000	2,600	92	239,000	14,500	12,800	14	180,000
Other Counties	2,000	1,300	72	93,500	300	100	10	1,000
<b>Total</b>	<b>8,900</b>	<b>7,100</b>	<b>83</b>	<b>591,000</b>	<b>20,100</b>	<b>16,100</b>	<b>14</b>	<b>226,000</b>
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne								
Emery								
Grand								
San Juan					22,700	19,800	16	317,000
Summit								
Uintah								
Wasatch								
Other Counties	800	400	68	27,000	1,200	1,000	12	12,000
<b>Total</b>	<b>800</b>	<b>400</b>	<b>68</b>	<b>27,000</b>	<b>23,900</b>	<b>20,800</b>	<b>16</b>	<b>329,000</b>
<b>Southern</b>								
Beaver								
Garfield								
Iron								
Kane								
Piute								
Washington								
Wayne								
Other Counties	2,800	1,600	54	87,000	500	200	15	3,000
<b>Total</b>	<b>2,800</b>	<b>1,600</b>	<b>54</b>	<b>87,000</b>	<b>500</b>	<b>200</b>	<b>15</b>	<b>3,000</b>
<b>State Total</b>	<b>52,500</b>	<b>47,500</b>	<b>88</b>	<b>4,176,000</b>	<b>107,500</b>	<b>93,500</b>	<b>20</b>	<b>1,858,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: All Wheat, by Cropping Practice, Utah, 2002 <sup>1</sup>

District and County	Irrigated				Non-Irrigated			
	Acres		Har- vested Yield	Production	Acres		Har- vested Yield	Production
	Planted	Harvested			Planted	Harvested		
	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	22,600	19,900	95	1,883,000	41,200	38,800	16	633,400
Cache	7,300	6,000	75	450,700	11,500	10,800	18	197,600
Davis	3,100	2,700	96	259,800				
Morgan	200	100	79	7,900	400	300	25	7,600
Rich								
Salt Lake	200	100	80	8,000	7,900	7,500	14	107,100
Tooele	1,300	1,000	75	75,200	2,200	2,100	14	28,700
Weber	1,900	1,700	95	161,500				
Other Counties	1,600	1,100	86	94,900	1,100	1,100	19	20,600
<b>Total</b>	<b>38,200</b>	<b>32,600</b>	<b>90</b>	<b>2,941,000</b>	<b>64,300</b>	<b>60,600</b>	<b>16</b>	<b>995,000</b>
<b>Central</b>								
Juab	1,000	800	66	52,800	4,000	3,500	12	42,000
Millard	3,800	2,900	80	232,200	1,000	800	12	9,500
Sanpete								
Sevier								
Utah	2,700	2,100	78	164,000	13,500	11,000	11	117,000
Other Counties	800	600	80	48,000	200	200	10	2,000
<b>Total</b>	<b>8,300</b>	<b>6,400</b>	<b>78</b>	<b>497,000</b>	<b>18,700</b>	<b>15,500</b>	<b>11</b>	<b>170,500</b>
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne								
Emery								
Grand								
San Juan					21,000	17,000	11	194,700
Summit					1,500	1,500	11	16,000
Uintah	100	100	70	7,000	800	800	20	15,800
Wasatch								
<b>Total</b>	<b>100</b>	<b>100</b>	<b>70</b>	<b>7,000</b>	<b>23,300</b>	<b>19,300</b>	<b>12</b>	<b>226,500</b>
<b>Southern</b>								
Beaver								
Garfield								
Iron								
Kane								
Piute								
Washington								
Wayne								
Other Counties	400	200	70	14,000	700	600	13	8,000
<b>Total</b>	<b>400</b>	<b>200</b>	<b>70</b>	<b>14,000</b>	<b>700</b>	<b>600</b>	<b>13</b>	<b>8,000</b>
<b>State Total</b>	<b>48,000</b>	<b>40,000</b>	<b>87</b>	<b>3,492,000</b>	<b>107,000</b>	<b>96,000</b>	<b>15</b>	<b>1,400,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: Winter Wheat, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres				Harvested Yield		Production	
	Planted		Harvested		2001	2002	2001	2002
	2001	2002	2001	2002				
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	60,000	59,000	56,400	55,000	54	43	3,072,000	2,360,000
Cache	15,000	16,000	13,900	14,700	39	38	536,000	563,000
Davis	2,500	2,700	2,500	2,400	97	86	243,000	207,500
Morgan								
Rich								
Salt Lake	7,500	8,500	6,800	8,000	17	21	115,500	170,600
Tooele	3,000	3,000	2,600	2,800	32	33	82,500	92,000
Weber	1,700	2,000	1,700	1,800	94	91	160,000	163,000
Other Counties	800	800	600	800	40	34	24,000	26,900
<b>Total</b>	90,500	92,000	84,500	85,500	50	42	4,233,000	3,583,000
<b>Central</b>								
Juab	5,000	5,000	2,900	4,300	33	22	95,500	94,800
Millard	3,500	3,500	2,800	2,900	64	65	179,500	188,000
Sanpete								
Sevier								
Utah	15,500	15,500	14,200	12,700	25	20	361,000	253,000
Other Counties	500	500	100	400	10	49	1,000	19,700
<b>Total</b>	24,500	24,500	20,000	20,300	32	27	637,000	555,500
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne								
Emery								
Grand								
San Juan	21,000	20,500	18,100	16,600	17	11	299,000	188,000
Summit								
Uintah								
Wasatch								
Other Counties	1,500	1,500	1,100	1,500	17	11	19,000	16,000
<b>Total</b>	22,500	22,000	19,200	18,100	17	11	318,000	204,000
<b>Southern</b>								
Beaver								
Garfield								
Iron								
Kane								
Piute								
Washington								
Wayne								
Other Counties	2,500	1,500	1,300	1,100	48	30	62,000	32,500
<b>Total</b>	2,500	1,500	1,300	1,100	48	30	62,000	32,500
<b>State Total</b>	140,000	140,000	125,000	125,000	42	35	5,250,000	4,375,000

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: Other Spring Wheat, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres				Harvested Yield		Production	
	Planted		Harvested		2001	2002	2001	2002
	2001	2002	2001	2002				
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	5,700	4,800	4,700	3,700	59	43	276,500	158,200
Cache	2,800	2,800	2,500	2,100	40	41	99,500	85,300
Davis	900	800	700	700	75	85	52,500	59,800
Morgan		600		400		39		15,500
Rich								
Salt Lake		500		400		36		14,400
Tooele	700	500	500	300	44	40	22,000	11,900
Weber	900		800		51		40,500	
Other Counties	1,500	500	1,100	100	43	79	47,000	7,900
<b>Total</b>	12,500	10,500	10,300	7,700	52	46	538,000	353,000
<b>Central</b>								
Juab	800		700		36		25,500	
Millard	1,400	1,300	1,200	800	75	67	90,000	53,700
Sanpete								
Sevier								
Utah	2,000	700	1,200	400	48	70	58,000	28,000
Other Counties	300	500	100	400	65	76	6,500	30,300
<b>Total</b>	4,500	2,500	3,200	1,600	56	70	180,000	112,000
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne								
Emery								
Grand								
San Juan	1,900	600	1,800	500	14	25	25,000	12,700
Summit								
Uintah		900		900		25		22,800
Wasatch								
Other Counties	300		200		65		13,000	
<b>Total</b>	2,200	1,500	2,000	1,400	19	25	38,000	35,500
<b>Southern</b>								
Beaver								
Garfield								
Iron								
Kane								
Piute								
Washington								
Wayne								
Other Counties	800	500	500	300	56	55	28,000	16,500
<b>Total</b>	800	500	500	300	56	55	28,000	16,500
<b>State Total</b>	20,000	15,000	16,000	11,000	49	47	784,000	517,000

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: Corn, All Cropping Practices, Utah, 2001 <sup>1</sup>

District and County	Acres Planted All Purposes	Corn for Grain			Corn for Silage		
		Acres Harvested	Harvested Yield	Production	Acres Harvested	Harvested Yield	Production
	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Acres</i>	<i>Tons</i>	<i>Tons</i>
<b>Northern</b>							
Box Elder	11,300	3,900	146	569,000	7,300	24	175,000
Cache	7,800				7,500	21	157,500
Davis	2,400	1,400	144	201,500	900	25	22,500
Morgan							
Rich							
Salt Lake							
Tooele							
Weber	4,200	900	146	131,000	3,300	25	84,000
Other Counties	1,300	500	140	70,000	1,000	21	21,000
<b>Total</b>	<b>27,000</b>	<b>6,700</b>	<b>145</b>	<b>971,500</b>	<b>20,000</b>	<b>23</b>	<b>460,000</b>
<b>Central</b>							
Juab							
Millard	7,400	2,000	145	290,000	5,300	20	106,000
Sanpete	2,600				2,600	20	52,000
Sevier	4,300	600	140	84,000	3,700	20	74,000
Utah	7,700	2,500	138	346,000	5,000	20	100,000
Other Counties	500	100	140	14,000	400	20	8,000
<b>Total</b>	<b>22,500</b>	<b>5,200</b>	<b>141</b>	<b>734,000</b>	<b>17,000</b>	<b>20</b>	<b>340,000</b>
<b>Eastern</b>							
Carbon							
Daggett							
Duchesne	2,400	1,100	134	147,000	1,300	16	21,000
Emery	1,500	500	140	70,000	900	16	14,000
Grand							
San Juan							
Summit							
Uintah	3,700	1,400	139	194,500	2,300	18	41,500
Wasatch							
Other Counties	900	100	130	13,000	600	17	10,000
<b>Total</b>	<b>8,500</b>	<b>3,100</b>	<b>137</b>	<b>424,500</b>	<b>5,100</b>	<b>17</b>	<b>86,500</b>
<b>Southern</b>							
Beaver	1,200				1,100	20	21,500
Garfield							
Iron	600				600	20	12,000
Kane							
Piute							
Washington							
Wayne							
Other Counties	200				200	20	4,000
<b>Total</b>	<b>2,000</b>				<b>1,900</b>	<b>20</b>	<b>37,500</b>
<b>State Total</b>	<b>60,000</b>	<b>15,000</b>	<b>142</b>	<b>2,130,000</b>	<b>44,000</b>	<b>21</b>	<b>924,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

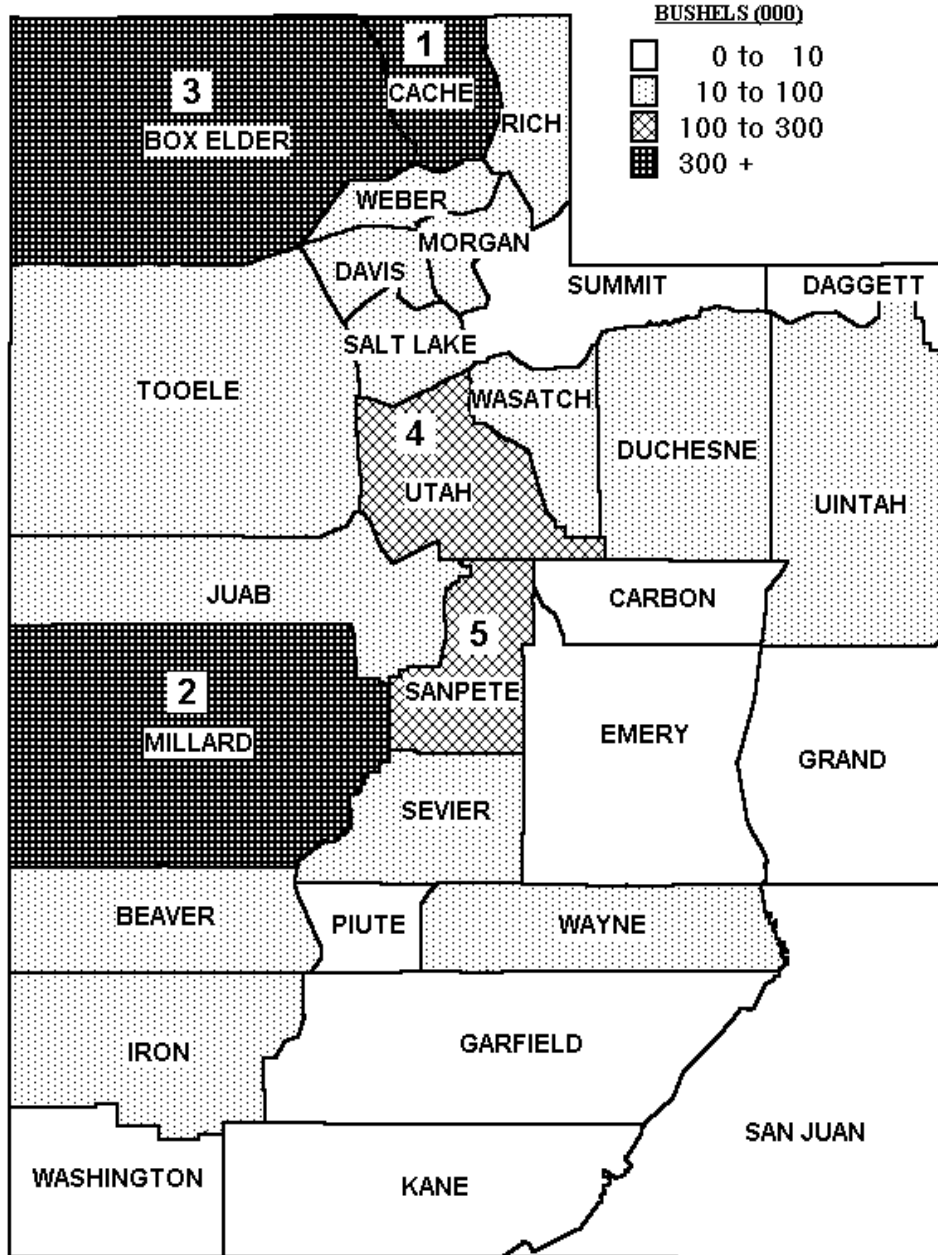
## County Estimates: Corn, All Cropping Practices, Utah, 2002 <sup>1</sup>

District and County	Acres Planted All Purposes	Corn for Grain			Corn for Silage		
		Acres Harvested	Harvested Yield	Production	Acres Harvested	Harvested Yield	Production
	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Acres</i>	<i>Tons</i>	<i>Tons</i>
<b>Northern</b>							
Box Elder	10,200	3,500	154	539,000	6,500	23	149,500
Cache	7,000	200	145	29,000	6,700	20	135,500
Davis	2,500	1,200	148	177,600	900	23	20,700
Morgan							
Rich							
Salt Lake	600	200	150	30,000	400	20	8,000
Tooele	500	100	140	14,000	400	20	8,000
Weber	4,000	800	153	122,400	2,900	24	70,800
Other Counties	200				200	20	4,000
<b>Total</b>	<b>25,000</b>	<b>6,000</b>	<b>152</b>	<b>912,000</b>	<b>18,000</b>	<b>22</b>	<b>396,500</b>
<b>Central</b>							
Juab	500	100	143	14,300	400	18	7,200
Millard	6,900	1,900	146	277,000	5,000	19	94,000
Sanpete	2,000				2,000	20	40,000
Sevier	3,800	500	156	78,000	3,300	19	62,700
Utah	6,800	2,500	136	340,700	4,300	20	88,100
<b>Total</b>	<b>20,000</b>	<b>5,000</b>	<b>142</b>	<b>710,000</b>	<b>15,000</b>	<b>19</b>	<b>292,000</b>
<b>Eastern</b>							
Carbon	500				500	16	8,000
Daggett							
Duchesne	2,200	1,100	131	144,400	1,100	16	17,600
Emery	1,400	600	119	71,500	800	15	12,000
Grand							
San Juan							
Summit							
Uintah	3,500	1,200	150	179,400	2,300	16	35,900
Wasatch							
Other Counties	400	100	127	12,700	300	15	4,500
<b>Total</b>	<b>8,000</b>	<b>3,000</b>	<b>136</b>	<b>408,000</b>	<b>5,000</b>	<b>16</b>	<b>78,000</b>
<b>Southern</b>							
Beaver	1,200				1,200	16	19,600
Garfield							
Iron	600				600	17	10,300
Kane							
Piute							
Washington							
Wayne							
Other Counties	200				200	18	3,600
<b>Total</b>	<b>2,000</b>				<b>2,000</b>	<b>17</b>	<b>33,500</b>
<b>State Total</b>	<b>55,000</b>	<b>14,000</b>	<b>145</b>	<b>2,030,000</b>	<b>40,000</b>	<b>20</b>	<b>800,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

# UTAH BARLEY PRODUCTION

## By County, 2002





## County Estimates: All Barley, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres				Harvested Yield		Production	
	Planted		Harvested		2001	2002	2001	2002
	2001	2002	2001	2002				
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	10,000	7,000	7,900	5,000	67	64	528,000	321,000
Cache	22,300	19,000	17,100	12,400	53	51	914,500	630,800
Davis	1,400	1,300	1,000	800	83	80	82,500	64,100
Morgan	3,000	3,000	2,200	1,600	65	62	142,000	99,000
Rich	1,600	1,100	1,200	700	65	64	78,000	45,000
Salt Lake	1,400	1,000	1,100	700	77	71	85,000	49,500
Tooele	2,000	1,600	1,500	1,000	60	54	90,000	54,000
Weber	2,300	2,000	1,800	1,300	71	68	128,000	87,800
<b>Total</b>	<b>44,000</b>	<b>36,000</b>	<b>33,800</b>	<b>23,500</b>	<b>61</b>	<b>57</b>	<b>2,048,000</b>	<b>1,351,200</b>
<b>Central</b>								
Juab	1,600	1,600	1,200	800	53	48	63,000	38,600
Millard	11,200	9,000	8,600	5,800	81	79	696,500	458,200
Sanpete	6,100	4,300	4,700	2,900	80	68	374,000	197,200
Sevier	3,000	2,800	2,300	1,500	79	66	182,500	99,000
Utah	8,100	6,300	6,400	4,000	67	68	430,000	272,500
<b>Total</b>	<b>30,000</b>	<b>24,000</b>	<b>23,200</b>	<b>15,000</b>	<b>75</b>	<b>71</b>	<b>1,746,000</b>	<b>1,065,500</b>
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne	1,700	1,700	1,100	1,100	71	59	78,000	64,800
Emery								
Grand								
San Juan								
Summit								
Uintah	1,500	1,400	1,000	800	70	63	70,000	50,400
Wasatch	1,000	800	800	600	65	69	52,000	41,400
Other Counties	800	600	600	500	73	43	43,500	21,500
<b>Total</b>	<b>5,000</b>	<b>4,500</b>	<b>3,500</b>	<b>3,000</b>	<b>70</b>	<b>59</b>	<b>243,500</b>	<b>178,100</b>
<b>Southern</b>								
Beaver	1,400	1,400	1,000	900	80	82	80,000	73,800
Garfield								
Iron	2,000	1,800	1,500	1,100	90	80	135,000	88,000
Kane								
Piute								
Washington								
Wayne	1,700	1,500	1,400	1,000	85	83	118,500	83,000
Other Counties	900	800	600	500	82	81	49,000	40,400
<b>Total</b>	<b>6,000</b>	<b>5,500</b>	<b>4,500</b>	<b>3,500</b>	<b>85</b>	<b>81</b>	<b>382,500</b>	<b>285,200</b>
<b>State Total</b>	<b>85,000</b>	<b>70,000</b>	<b>65,000</b>	<b>45,000</b>	<b>68</b>	<b>64</b>	<b>4,420,000</b>	<b>2,880,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: All Barley, by Cropping Practice, Utah, 2001 <sup>1</sup>

District and County	Irrigated				Non-Irrigated			
	Acres		Harvested Yield	Production	Acres		Harvested Yield	Production
	Planted	Harvested			Planted	Harvested		
	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	7,800	6,000	80	480,000	2,200	1,900	25	48,000
Cache	16,000	11,600	67	777,000	6,300	5,500	25	137,500
Davis	1,300	900	89	80,000				
Morgan	2,200	1,500	82	123,000				
Rich	1,500	1,100	68	75,000				
Salt Lake	1,200	900	89	80,000				
Tooele	2,000	1,500	60	90,000				
Weber	2,000	1,500	80	120,000				
Other Counties					1,500	1,400	27	37,500
<b>Total</b>	<b>34,000</b>	<b>25,000</b>	<b>73</b>	<b>1,825,000</b>	<b>10,000</b>	<b>8,800</b>	<b>25</b>	<b>223,000</b>
<b>Central</b>								
Juab	1,400	1,000	58	58,000				
Millard	11,200	8,600	81	696,500				
Sanpete	5,800	4,500	82	369,000				
Sevier	2,500	1,900	91	172,500				
Utah	7,600	6,000	70	420,000				
Other Counties					1,500	1,200	25	30,000
<b>Total</b>	<b>28,500</b>	<b>22,000</b>	<b>78</b>	<b>1,716,000</b>	<b>1,500</b>	<b>1,200</b>	<b>25</b>	<b>30,000</b>
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne	1,500	1,100	71	78,000				
Emery								
Grand								
San Juan								
Summit								
Uintah	1,400	1,000	70	70,000				
Wasatch	1,000	800	65	52,000				
Other Counties	600	600	73	43,500	500			
<b>Total</b>	<b>4,500</b>	<b>3,500</b>	<b>70</b>	<b>243,500</b>	<b>500</b>			
<b>Southern</b>								
Beaver	1,400	1,000	80	80,000				
Garfield								
Iron	2,000	1,500	90	135,000				
Kane								
Piute								
Washington								
Wayne	1,700	1,400	85	118,500				
Other Counties	900	600	82	49,000				
<b>Total</b>	<b>6,000</b>	<b>4,500</b>	<b>85</b>	<b>382,500</b>				
<b>State Total</b>	<b>73,000</b>	<b>55,000</b>	<b>76</b>	<b>4,167,000</b>	<b>12,000</b>	<b>10,000</b>	<b>25</b>	<b>253,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: All Barley, by Cropping Practice, Utah, 2002 <sup>1</sup>

District and County	Irrigated				Non-Irrigated			
	Acres		Harvested Yield	Production	Acres		Harvested Yield	Production
	Planted	Harvested			Planted	Harvested		
	Acres	Acres	Bushels	Bushels	Acres	Acres	Bushels	Bushels
<b>Northern</b>								
Box Elder	4,800	3,500	78	273,000	2,200	1,500	26	38,300
Cache	12,800	7,400	67	495,800	6,200	5,000	26	130,000
Davis	1,200	700	88	61,600	100	100	25	2,500
Morgan	2,200	900	89	80,100	800	700	27	18,900
Rich	1,000	600	70	42,000	100	100	30	3,000
Salt Lake	800	500	89	44,500	200	200	27	5,400
Tooele	1,500	900	60	54,000	100	100	25	2,500
Weber	1,700	1,000	80	80,000	300	300	27	8,100
<b>Total</b>	<b>26,000</b>	<b>15,500</b>	<b>73</b>	<b>1,131,000</b>	<b>10,000</b>	<b>8,000</b>	<b>26</b>	<b>208,700</b>
<b>Central</b>								
Juab	1,400	600	56	33,600	200	200	25	5,000
Millard	9,000	5,800	79	458,200				
Sanpete	4,000	2,600	74	192,400	300	300	16	4,800
Sevier	2,300	1,000	89	89,000	500	500	20	10,000
Utah	5,800	3,500	75	262,500	500	500	20	10,000
<b>Total</b>	<b>22,500</b>	<b>13,500</b>	<b>77</b>	<b>1,035,700</b>	<b>1,500</b>	<b>1,500</b>	<b>20</b>	<b>29,800</b>
<b>Eastern</b>								
Carbon								
Daggett								
Duchesne	1,500	900	72	64,800	200	200	25	5,000
Emery								
Grand								
San Juan								
Summit								
Uintah	1,300	700	72	50,400	100	100	25	2,500
Wasatch	800	600	69	41,400				
Other Counties	400	300	72	21,500	200	200	20	4,000
<b>Total</b>	<b>4,000</b>	<b>2,500</b>	<b>71</b>	<b>178,100</b>	<b>500</b>	<b>500</b>	<b>23</b>	<b>11,500</b>
<b>Southern</b>								
Beaver	1,400	900	82	73,800				
Garfield								
Iron	1,800	1,100	80	88,000				
Kane								
Piute								
Washington								
Wayne	1,500	1,000	83	83,000				
Other Counties	800	500	81	40,400				
<b>Total</b>	<b>5,500</b>	<b>3,500</b>	<b>81</b>	<b>285,200</b>				
<b>State Total</b>	<b>58,000</b>	<b>35,000</b>	<b>75</b>	<b>2,630,000</b>	<b>12,000</b>	<b>10,000</b>	<b>25</b>	<b>250,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

## County Estimates: Oats, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres				Harvested Yield per acre		Production	
	Planted		Harvested		2001	2002	2001	2002
	2001	2002	2001	2002				
	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>	<i>Bushels</i>
<b>Northern</b>								
Box Elder	4,000	4,600	600	600	78	99	47,000	59,400
Cache	3,000	2,900	500	500	58	87	29,000	43,500
Davis	600	700	100	100	75	96	7,500	9,600
Morgan	700	800	200	100	68	100	13,500	10,000
Rich	1,300	1,500		200		68		13,600
Salt Lake	800	800	100	100	85	100	8,500	10,000
Tooele	2,000	1,800	100	100	60	82	6,000	8,200
Weber	1,100	1,400	200	100	73	97	14,500	9,700
<b>Total</b>	13,500	14,500	1,800	1,800	70	91	126,000	164,000
<b>Central</b>								
Juab	1,100	1,300	100	100	70	79	7,000	7,900
Millard	4,400	5,000	200	300	80	90	16,000	27,000
Sanpete	4,000	4,000	200	200	75	74	15,000	14,800
Sevier	4,000	3,700	200	200	78	84	15,500	16,800
Utah	3,500	3,500	400	500	81	87	32,500	43,500
<b>Total</b>	17,000	17,500	1,100	1,300	78	85	86,000	110,000
<b>Eastern</b>								
Carbon	1,100	1,200						
Daggett								
Duchesne	4,500	3,700	300	200	80	94	24,000	18,800
Emery	3,300	3,800	500	300	70	89	35,000	26,700
Grand								
San Juan	1,800	1,000	1,200	500	28	86	33,500	43,000
Summit	1,000	800		100		97		9,700
Uintah	2,300	1,500	400	200	75	96	30,000	19,200
Wasatch	1,000	1,100	100	200	75	93	7,500	18,600
Other Counties	500	400						
<b>Total</b>	15,500	13,500	2,500	1,500	52	91	130,000	136,000
<b>Southern</b>								
Beaver	2,100	2,100	200	100	70	95	14,000	9,500
Garfield	1,500	1,000	100		80		8,000	
Iron	5,300	6,000	100	100	90	100	9,000	10,000
Kane	800	800						
Piute	1,300	900						
Washington	1,200	1,300	100	100	80	100	8,000	10,000
Wayne	1,800	2,400	100	100	90	105	9,000	10,500
<b>Total</b>	14,000	14,500	600	400	80	100	48,000	40,000
<b>State Total</b>	60,000	60,000	6,000	5,000	65	90	390,000	450,000

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

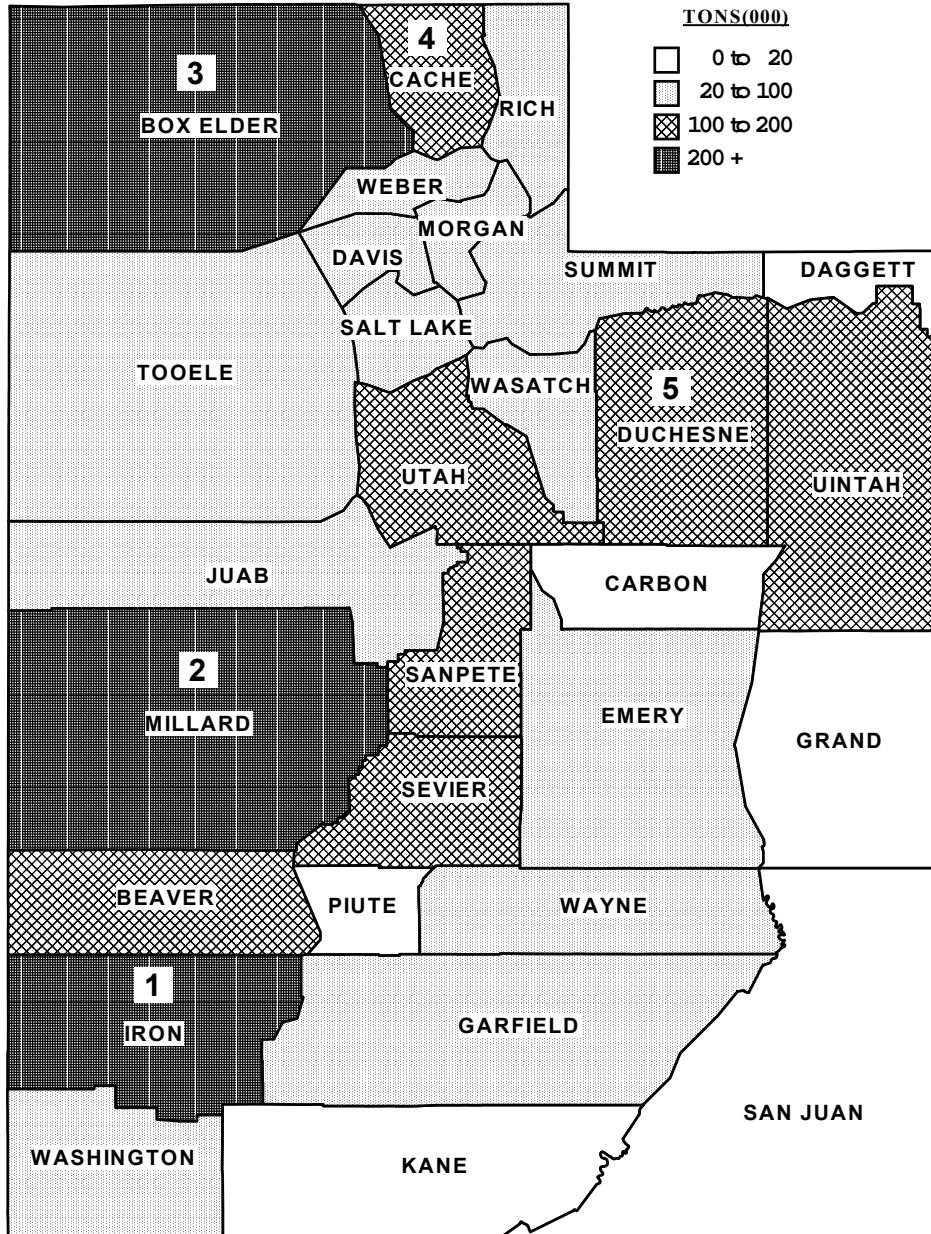
## County Estimates: All Hay, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres Harvested		Harvested Yield		Production	
	2001	2002	2001	2002	2001	2002
	<i>Acres</i>	<i>Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
<b>Northern</b>						
Box Elder	57,900	63,500	4.1	3.8	235,800	243,100
Cache	66,300	66,000	3.2	3.2	214,800	207,900
Davis	8,200	8,400	3.7	3.5	30,200	29,100
Morgan	9,400	9,600	3.0	2.7	28,600	25,800
Rich	47,700	45,000	1.7	1.4	82,900	64,500
Salt Lake	7,700	7,500	3.8	3.6	29,400	27,200
Tooele	14,400	14,800	3.5	3.0	50,600	44,300
Weber	17,700	17,200	4.2	3.9	73,500	66,300
<b>Total</b>	<b>229,300</b>	<b>232,000</b>	<b>3.3</b>	<b>3.1</b>	<b>745,800</b>	<b>708,200</b>
<b>Central</b>						
Juab	18,900	19,100	3.4	2.9	64,500	55,500
Millard	66,100	64,200	4.1	3.7	269,700	235,600
Sanpete	45,400	47,000	3.4	2.7	155,400	126,600
Sevier	27,800	27,700	4.1	3.8	113,800	106,200
Utah	38,400	38,000	4.0	3.4	153,100	130,800
<b>Total</b>	<b>196,600</b>	<b>196,000</b>	<b>3.8</b>	<b>3.3</b>	<b>756,500</b>	<b>654,700</b>
<b>Eastern</b>						
Carbon	6,000	5,700	3.2	3.0	18,900	16,900
Daggett	5,200	4,900	2.6	2.0	13,300	9,800
Duchesne	51,000	50,500	3.4	3.1	173,600	154,800
Emery	18,500	18,500	3.4	3.0	62,100	55,900
Grand	2,600		4.2		10,800	
San Juan	7,600		2.3		17,500	
Summit	18,300	18,200	2.3	2.1	42,600	38,000
Uintah	38,200	38,500	3.6	2.9	137,900	112,800
Wasatch	7,900	7,700	3.6	3.1	28,800	23,900
Other Counties		9,000		2.7		24,000
<b>Total</b>	<b>155,300</b>	<b>153,000</b>	<b>3.3</b>	<b>2.9</b>	<b>505,500</b>	<b>436,100</b>
<b>Southern</b>						
Beaver	26,500	27,500	4.4	4.1	117,500	112,600
Garfield	13,700	13,000	3.0	2.6	40,500	34,300
Iron	53,600	54,200	4.7	4.3	250,400	234,700
Kane	3,700	4,000	3.0	2.8	11,100	11,300
Piute	9,600	9,000	2.8	2.3	27,200	21,000
Washington	9,800	9,300	4.0	3.9	39,200	36,300
Wayne	11,900	12,000	3.6	3.1	42,300	36,800
<b>Total</b>	<b>128,800</b>	<b>129,000</b>	<b>4.1</b>	<b>3.8</b>	<b>528,200</b>	<b>487,000</b>
<b>State</b>						
<b>Total</b>	<b>710,000</b>	<b>710,000</b>	<b>3.6</b>	<b>3.2</b>	<b>2,536,000</b>	<b>2,286,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

# UTAH ALFALFA HAY PRODUCTION

## By County, 2002



**County Estimates: Alfalfa & Alfalfa Mixtures for Hay,  
All Cropping Practices, Utah, 2001 & 2002**

District and County	Acres Harvested		Harvested Yield		Production	
	2001	2002	2001	2002	2001	2002
	<i>Acres</i>	<i>Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
<b>Northern</b>						
Box Elder	48,500	52,000	4.5	4.1	216,300	213,200
Cache	56,500	57,000	3.4	3.3	193,300	188,100
Davis	6,300	6,700	4.1	3.8	26,100	25,500
Morgan	7,700	7,300	3.2	2.9	24,900	21,200
Rich	10,500	10,500	2.2	2.2	22,900	23,100
Salt Lake	6,500	6,500	4.1	3.8	26,600	24,700
Tooele	12,000	12,500	3.9	3.3	46,300	41,300
Weber	14,500	14,500	4.5	4.2	65,600	60,900
<b>Total</b>	162,500	167,000	3.8	3.6	622,000	598,000
<b>Central</b>						
Juab	15,500	16,000	3.8	3.2	58,600	51,200
Millard	60,500	59,000	4.2	3.8	256,700	224,200
Sanpete	33,500	35,000	3.8	3.0	128,900	105,000
Sevier	24,500	25,000	4.3	4.0	105,200	100,000
Utah	29,000	30,000	4.5	3.8	130,600	114,000
<b>Total</b>	163,000	165,000	4.2	3.6	680,000	594,400
<b>Eastern</b>						
Carbon	4,800	4,800	3.5	3.2	16,600	15,400
Daggett	2,700	2,600	3.0	2.6	8,100	6,800
Duchesne	36,500	37,000	3.8	3.6	139,100	133,200
Emery	15,700	15,500	3.5	3.2	55,600	49,600
Grand	2,100	2,100	4.6	4.3	9,600	9,000
San Juan	6,400	6,200	2.3	2.2	15,000	13,600
Summit	8,700	8,700	2.7	2.4	23,100	20,900
Uintah	30,500	32,000	4.0	3.2	121,400	102,400
Wasatch	6,100	6,100	4.0	3.4	24,500	20,700
<b>Total</b>	113,500	115,000	3.6	3.2	413,000	371,600
<b>Southern</b>						
Beaver	23,500	24,000	4.7	4.4	109,600	105,600
Garfield	11,000	11,000	3.2	2.7	35,000	29,700
Iron	49,000	50,000	4.8	4.5	237,400	225,000
Kane	2,900	3,000	3.3	3.1	9,500	9,300
Piute	7,000	7,000	3.0	2.4	21,200	16,800
Washington	7,500	8,000	4.6	4.2	34,400	33,600
Wayne	10,100	10,000	3.8	3.2	37,900	32,000
<b>Total</b>	111,000	113,000	4.4	4.0	485,000	452,000
<b>State</b>						
<b>Total</b>	550,000	560,000	4.0	3.6	2,200,000	2,016,000

## County Estimates: Other Hay, All Cropping Practices, Utah, 2001 & 2002 <sup>1</sup>

District and County	Acres Harvested		Harvested Yield		Production	
	2001	2002	2001	2002	2001	2002
	<i>Acres</i>	<i>Acres</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>	<i>Tons</i>
<b>Northern</b>						
Box Elder	9,400	11,500	2.1	2.6	19,500	29,900
Cache	9,800	9,000	2.2	2.2	21,500	19,800
Davis	1,900	1,700	2.2	2.1	4,100	3,600
Morgan	1,700	2,300	2.2	2.0	3,700	4,600
Rich	37,200	34,500	1.6	1.2	60,000	41,400
Salt Lake	1,200	1,000	2.3	2.5	2,800	2,500
Tooele	2,400	2,300	1.8	1.3	4,300	3,000
Weber	3,200	2,700	2.5	2.0	7,900	5,400
<b>Total</b>	<b>66,800</b>	<b>65,000</b>	<b>1.9</b>	<b>1.7</b>	<b>123,800</b>	<b>110,200</b>
<b>Central</b>						
Juab	3,400	3,100	1.7	1.4	5,900	4,300
Millard	5,600	5,200	2.3	2.2	13,000	11,400
Sanpete	11,900	12,000	2.2	1.8	26,500	21,600
Sevier	3,300	2,700	2.6	2.3	8,600	6,200
Utah	9,400	8,000	2.4	2.1	22,500	16,800
<b>Total</b>	<b>33,600</b>	<b>31,000</b>	<b>2.3</b>	<b>1.9</b>	<b>76,500</b>	<b>60,300</b>
<b>Eastern</b>						
Carbon	1,200	900	1.9	1.7	2,300	1,500
Daggett	2,500	2,300	2.1	1.3	5,200	3,000
Duchesne	14,500	13,500	2.4	1.6	34,500	21,600
Emery	2,800	3,000	2.3	2.1	6,500	6,300
Grand	500		2.4		1,200	
San Juan	1,200		2.1		2,500	
Summit	9,600	9,500	2.0	1.8	19,500	17,100
Uintah	7,700	6,500	2.1	1.6	16,500	10,400
Wasatch	1,800	1,600	2.4	2.0	4,300	3,200
Other Counties		700		2.0		1,400
<b>Total</b>	<b>41,800</b>	<b>38,000</b>	<b>2.2</b>	<b>1.7</b>	<b>92,500</b>	<b>64,500</b>
<b>Southern</b>						
Beaver	3,000	3,500	2.6	2.0	7,900	7,000
Garfield	2,700	2,000	2.0	2.3	5,500	4,600
Iron	4,600	4,200	2.8	2.3	13,000	9,700
Kane	800	1,000	2.0	2.0	1,600	2,000
Piute	2,600	2,000	2.3	2.1	6,000	4,200
Washington	2,300	1,300	2.1	2.1	4,800	2,700
Wayne	1,800	2,000	2.4	2.4	4,400	4,800
<b>Total</b>	<b>17,800</b>	<b>16,000</b>	<b>2.4</b>	<b>2.2</b>	<b>43,200</b>	<b>35,000</b>
<b>State Total</b>	<b>160,000</b>	<b>150,000</b>	<b>2.1</b>	<b>1.8</b>	<b>336,000</b>	<b>270,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

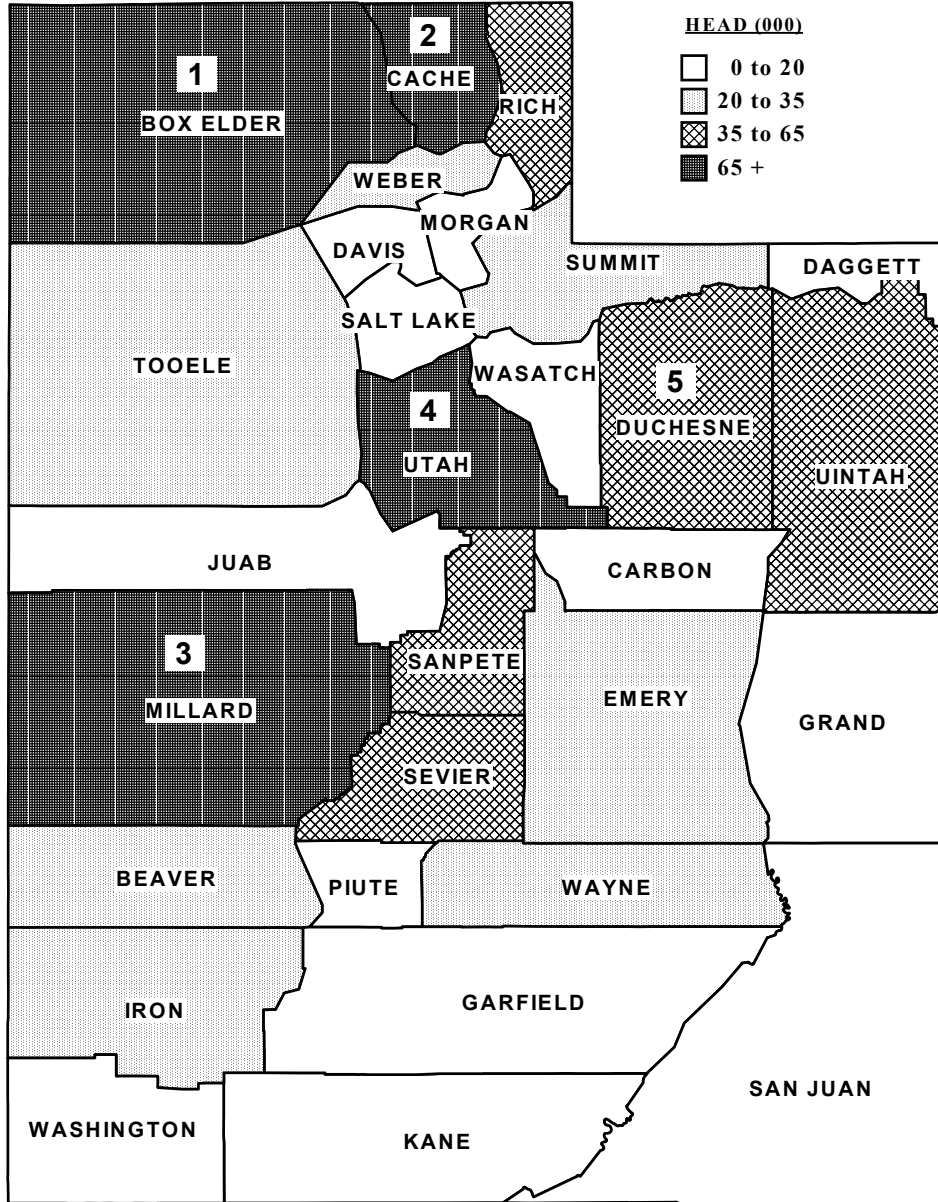


**County Estimates: Utah Mink Pelts Produced 2001-2002  
Females Bred to Produce Kits 2002 and 2003**

District and County	Pelts Produced		Females Bred to Produce Kits	
	2001	2002	2002	2003
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
<b>Northern</b>				
Cache	80,000	62,000	16,200	16,200
Morgan	100,000	108,000	26,400	26,600
Salt Lake	30,000	34,000	9,800	9,400
Other Counties	14,000	11,000		
<b>Total</b>	224,000	215,000	52,400	52,200
<b>Central</b>				
Utah	299,000	283,000	72,300	67,000
<b>Total</b>	299,000	283,000	72,300	67,000
<b>Eastern</b>				
Summit	87,000	77,000	24,300	15,800
<b>Total</b>	87,000	77,000	24,300	15,800
<b>State</b>				
<b>Total</b>	610,000	575,000	149,000	135,000

# UTAH ALL CATTLE INVENTORY

By County, January 1, 2003



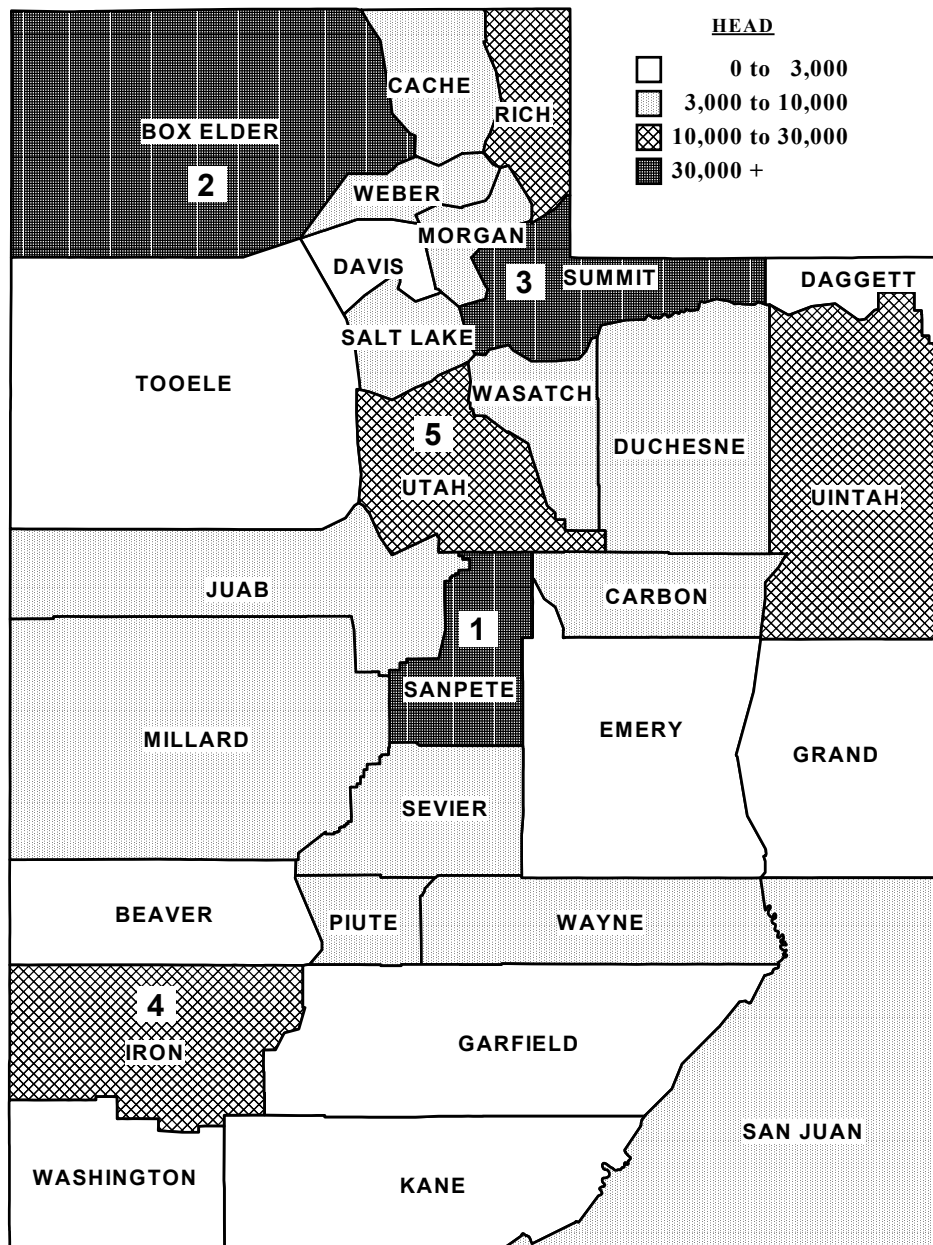
## County Estimates: Cattle, Utah, January 1, 2002 & 2003

County	All Cattle		Beef Cows		Milk Cows <sup>1</sup>	
	2002	2003	2002	2003	2002	2003
	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>	<i>Number</i>
<b>Northern</b>						
Box Elder	110,000	105,000	41,000	33,000	11,000	10,500
Cache	76,000	73,000	8,000	9,000	23,500	21,000
Davis	8,000	8,000	3,500	4,500	500	
Morgan	11,000	9,000	4,500	3,000	1,500	800
Rich	52,000	45,000	32,000	24,500		
Salt Lake	8,000	8,000	3,000	5,000	700	
Tooele	28,000	27,000	13,000	16,000		
Weber	27,000	25,000	7,000	7,000	5,500	4,700
Other Counties					300	1,000
<b>Total</b>	<b>320,000</b>	<b>300,000</b>	<b>112,000</b>	<b>102,000</b>	<b>43,000</b>	<b>38,000</b>
<b>Central</b>						
Juab	17,000	17,000	8,000	7,000	500	
Millard	67,000	71,000	21,000	23,500	12,500	15,000
Sanpete	54,000	53,000	18,000	17,000	6,200	6,700
Sevier	44,000	39,000	12,000	11,000	5,300	
Utah	63,000	65,000	20,000	19,500	8,500	9,800
Other Counties						4,500
<b>Total</b>	<b>245,000</b>	<b>245,000</b>	<b>79,000</b>	<b>78,000</b>	<b>33,000</b>	<b>36,000</b>
<b>Eastern</b>						
Carbon	11,000	11,000	6,000	6,500		
Daggett	4,000	4,000	2,000	3,000		
Duchesne	66,000	59,000	32,000	28,000	2,500	2,800
Emery	27,000	27,000	13,000	16,000	500	
Grand	2,500	3,000	2,000	2,000		
San Juan	20,000	17,000	11,000	9,500		
Summit	27,000	29,000	14,000	13,500	2,000	1,400
Uintah	49,000	44,000	23,000	17,500	2,000	1,400
Wasatch	8,500	11,000	3,000	6,000	1,000	1,000
Other Counties						400
<b>Total</b>	<b>215,000</b>	<b>205,000</b>	<b>106,000</b>	<b>102,000</b>	<b>8,000</b>	<b>7,000</b>
<b>Southern</b>						
Beaver	35,000	31,000	12,000	12,000	3,000	3,000
Garfield	20,000	17,000	11,000	7,500		
Iron	24,000	22,000	10,000	8,000	2,500	2,800
Kane	10,000	9,000	5,500	5,000		
Piute	11,000	13,000	4,000	5,500	1,800	2,400
Washington	19,000	17,000	9,000	8,500		
Wayne	21,000	21,000	8,500	10,500	1,600	1,700
Other Counties					100	100
<b>Total</b>	<b>140,000</b>	<b>130,000</b>	<b>60,000</b>	<b>57,000</b>	<b>9,000</b>	<b>10,000</b>
<b>State Total</b>	<b>920,000</b>	<b>880,000</b>	<b>357,000</b>	<b>339,000</b>	<b>93,000</b>	<b>91,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

# UTAH BREEDING SHEEP INVENTORY

By County, January 1, 2003



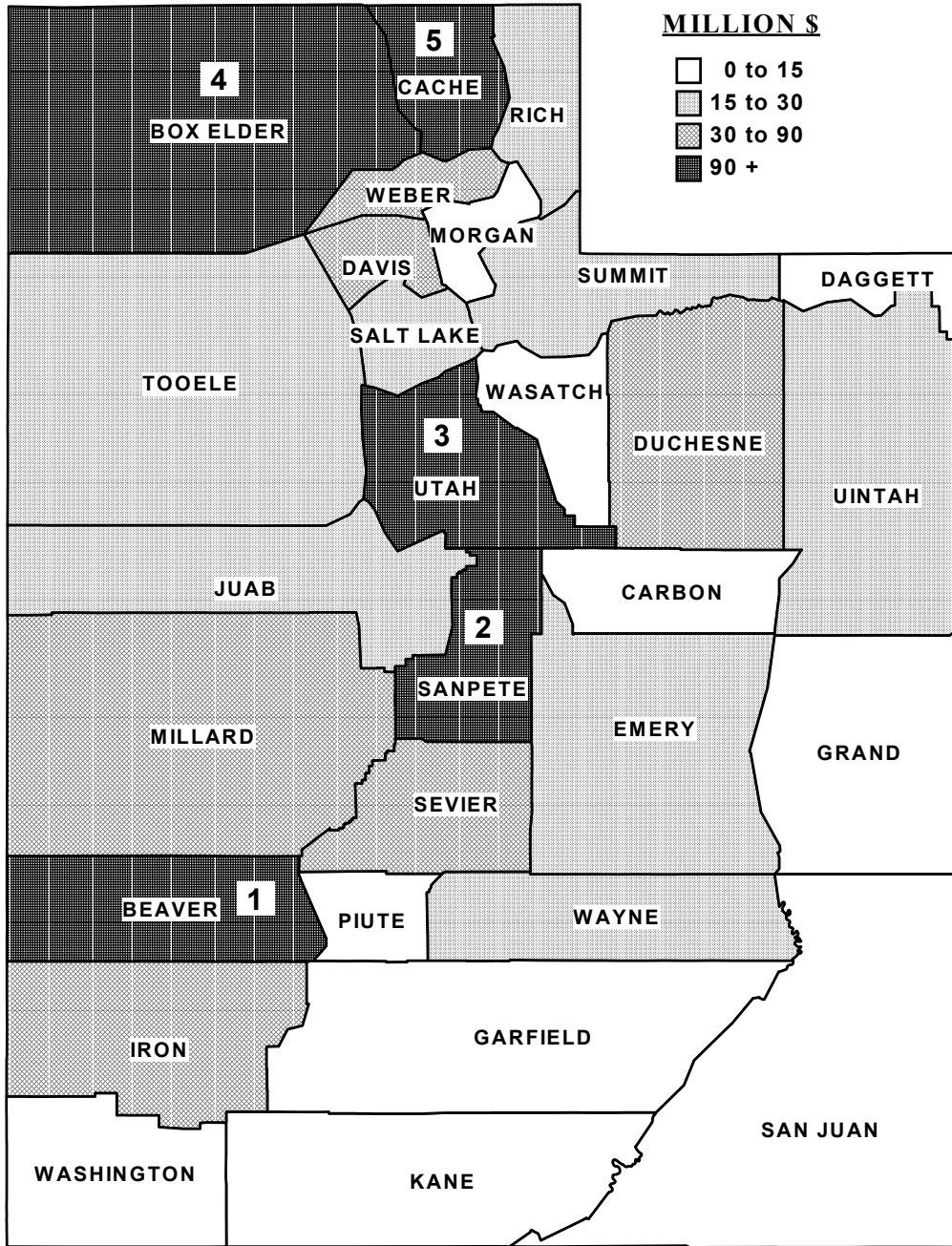
## County Estimates: Breeding Sheep and Lambs, Utah, January 1, 2002 & 2003 <sup>1</sup>

District and County	2002	2003
	<i>Number</i>	<i>Number</i>
<b>Northern</b>		
Box Elder	48,000	56,000
Cache	4,400	4,200
Davis	3,100	2,100
Morgan	9,300	6,600
Rich	12,000	10,300
Salt Lake	3,300	3,000
Tooele	4,000	2,600
Weber	4,900	5,200
<b>Total</b>	<b>89,000</b>	<b>90,000</b>
<b>Central</b>		
Juab	7,500	4,100
Millard	6,300	5,400
Sanpete	61,000	57,800
Sevier	4,400	4,700
Utah	28,800	19,000
<b>Total</b>	<b>108,000</b>	<b>91,000</b>
<b>Eastern</b>		
Carbon	5,400	5,800
Daggett		
Duchesne	7,300	4,300
Emery	3,900	2,900
Grand		
San Juan	6,300	5,100
Summit	29,300	32,600
Uintah	10,600	10,500
Wasatch	12,000	6,600
Other Counties	200	200
<b>Total</b>	<b>75,000</b>	<b>68,000</b>
<b>Southern</b>		
Beaver		
Garfield	1,800	1,000
Iron	33,500	27,900
Kane	1,200	1,300
Piute	4,400	4,100
Washington		
Wayne	6,200	5,800
Other Counties	900	900
<b>Total</b>	<b>48,000</b>	<b>41,000</b>
<b>State</b>		
<b>Total</b>	<b>320,000</b>	<b>290,000</b>

<sup>1</sup> Counties with missing data are included in the appropriate district's "Other Counties".

# UTAH CASH RECEIPTS FROM FARMING

## By County, 2002



## County Estimates: Cash Receipts from Farming, by County - 2001 Revised, 2002

District and County	Livestock and Livestock Products		Crops		Total	
	2001	2002	2001	2002	2001	2002
	<i>Million Dollars</i>	<i>Million Dollars</i>	<i>Million Dollars</i>	<i>Million Dollars</i>	<i>Million Dollars</i>	<i>Million Dollars</i>
<b>Northern</b>						
Box Elder	76.2	69.6	33.2	32.7	109.4	102.2
Cache	100.8	83.9	17.0	17.3	117.8	101.1
Davis	6.0	5.4	31.7	32.3	37.7	37.7
Morgan	12.2	9.8	1.9	1.8	14.1	11.5
Rich	22.2	19.2	4.6	3.6	26.8	22.9
Salt Lake	16.5	15.3	12.7	13.2	29.2	28.5
Tooele	13.3	12.5	3.5	3.3	16.7	15.8
Weber	26.9	21.9	8.9	8.6	35.8	30.5
Other Counties						
<b>Total</b>	<b>274.2</b>	<b>237.6</b>	<b>113.4</b>	<b>112.7</b>	<b>387.7</b>	<b>350.3</b>
<b>Central</b>						
Juab	8.8	8.4	7.6	7.3	16.4	15.7
Millard	66.6	68.3	18.3	17.0	84.9	85.3
Sanpete	89.3	101.6	9.6	8.1	98.9	109.8
Sevier	34.9	28.8	7.0	6.7	41.9	35.5
Utah	73.7	72.9	37.3	33.8	111.0	106.7
Other Counties						
<b>Total</b>	<b>273.3</b>	<b>280.0</b>	<b>79.9</b>	<b>73.0</b>	<b>353.2</b>	<b>352.9</b>
<b>Eastern</b>						
Carbon	4.9	5.0	1.2	1.1	6.1	6.1
Daggett	1.8	1.8	0.7	0.5	2.5	2.3
Duchesne	34.5	31.1	9.4	8.7	43.9	39.8
Emery	12.9	12.3	3.6	3.4	16.5	15.7
Grand	3.4	3.7	1.3	1.2	4.7	4.8
San Juan	8.6	7.3	3.5	3.1	12.1	10.4
Summit	20.9	20.0	2.2	2.1	23.1	22.1
Uintah	26.6	22.3	7.8	6.7	34.4	29.0
Wasatch	6.8	7.2	2.1	1.9	8.9	9.1
Other Counties						
<b>Total</b>	<b>120.4</b>	<b>110.7</b>	<b>31.8</b>	<b>28.7</b>	<b>152.2</b>	<b>139.4</b>
<b>Southern</b>						
Beaver	111.7	107.1	7.1	7.2	118.9	114.3
Garfield	8.6	7.3	2.2	1.9	10.8	9.2
Iron	30.2	29.0	16.6	16.1	46.9	45.0
Kane	4.3	3.9	0.6	0.6	5.0	4.6
Piute	9.3	10.7	1.5	1.3	10.9	12.0
Washington	9.4	8.6	4.0	3.8	13.4	12.4
Wayne	13.6	13.0	2.7	2.5	16.3	15.5
Other Counties						
<b>Total</b>	<b>187.2</b>	<b>179.5</b>	<b>34.8</b>	<b>33.4</b>	<b>222.0</b>	<b>212.9</b>
<b>State</b>						
<b>Total</b>	<b>855.1</b>	<b>807.8</b>	<b>260.0</b>	<b>247.8</b>	<b>1,115.1</b>	<b>1,055.6</b>

# 1997 Census of Agriculture

## 1997 Census of Agriculture: Number of Farms by Value of Sales, by County, Utah <sup>1</sup>

District and County	Gross Value of Sales													
	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	
	Farms	% <sup>2</sup>	Farms	% <sup>2</sup>	Farms	% <sup>2</sup>	Farms	% <sup>2</sup>	Farms	% <sup>2</sup>	Farms	% <sup>2</sup>	Farms	% <sup>2</sup>
<b>Northern</b>														
Box Elder . . .	261	24.2	110	10.2	124	11.5	169	15.7	111	10.3	104	9.7	198	18.4
Cache . . . . .	322	26.1	149	12.1	146	11.9	203	16.5	104	8.4	78	6.3	230	18.7
Davis . . . . .	231	41.3	83	14.8	69	12.3	74	13.2	31	5.5	18	3.2	53	9.5
Morgan . . . . .	65	26.7	28	11.5	38	15.6	37	15.2	13	5.4	22	9.1	40	16.5
Rich . . . . .	25	15.4	13	8.0	13	8.0	17	10.5	26	16.0	35	21.6	33	20.4
Salt Lake . . .	260	43.8	93	15.7	70	11.8	66	11.1	33	5.6	26	4.4	45	7.6
Tooele . . . . .	124	37.3	30	9.0	55	16.6	45	13.6	36	10.8	20	6.0	22	6.6
Weber . . . . .	385	41.1	155	16.6	126	13.5	131	14.0	42	4.5	33	3.5	64	6.8
<b>Central</b>														
Juab . . . . .	63	27.6	25	11.0	38	16.7	33	14.5	32	14.0	14	6.1	23	10.1
Millard . . . . .	104	16.0	52	8.0	63	9.7	124	19.1	108	16.6	69	10.6	130	20.0
Sanpete . . . .	174	22.4	91	11.7	113	14.6	125	16.1	88	11.3	45	5.8	140	18.0
Sevier . . . . .	124	25.9	53	11.1	60	12.6	98	20.5	51	10.7	34	7.1	58	12.1
Utah . . . . .	704	39.3	269	15.0	230	12.8	223	12.5	123	6.9	73	4.1	168	9.4
<b>Eastern</b>														
Carbon . . . . .	87	43.7	19	9.5	30	15.1	31	15.6	10	5.0	13	6.5	9	4.5
Daggett . . . . .	3	8.3	7	19.4	3	8.3	6	16.7	9	25.0	4	11.1	4	11.1
Duchesne . . .	179	22.1	102	12.6	118	14.6	169	20.8	98	12.1	72	8.9	73	9.0
Emery . . . . .	115	25.6	85	18.9	77	17.1	107	23.8	35	7.8	17	3.8	14	3.1
Grand . . . . .	33	38.8	9	10.6	7	8.2	10	11.8	12	14.1	9	10.6	5	5.9
San Juan . . .	71	30.7	20	8.7	32	13.9	31	13.4	27	11.7	26	11.3	24	10.4
Summit . . . . .	150	31.5	66	13.9	70	14.7	79	16.6	46	9.7	22	4.6	43	9.0
Uintah . . . . .	216	27.2	130	16.4	134	16.9	142	17.9	85	10.7	48	6.0	40	5.0
Wasatch . . . .	114	38.8	52	17.7	41	13.9	41	13.9	16	5.4	7	2.4	23	7.8
<b>Southern</b>														
Beaver . . . . .	28	12.8	24	11.0	25	11.4	32	14.6	22	10.0	30	13.7	58	26.5
Garfield . . . .	57	20.0	36	12.6	53	18.6	58	20.4	39	13.7	30	10.5	12	4.2
Iron . . . . .	93	24.8	52	13.9	38	10.1	56	14.9	29	7.7	40	10.7	67	17.9
Kane . . . . .	40	28.0	22	15.4	27	18.9	22	15.4	17	11.9	7	4.9	8	5.6
Piute . . . . .	7	6.6	8	7.5	14	13.2	32	30.2	11	10.4	19	17.9	15	14.2
Washington . .	158	36.8	63	14.7	67	15.6	70	16.3	38	8.9	16	3.7	17	4.0
Wayne . . . . .	33	17.3	21	11.0	23	12.0	39	20.4	36	18.8	18	9.4	21	11.0
<b>State</b>														
<b>Total . . . . .</b>	<b>4,226</b>	<b>29.8</b>	<b>1,867</b>	<b>13.2</b>	<b>1,904</b>	<b>13.4</b>	<b>2,270</b>	<b>16.0</b>	<b>1,328</b>	<b>9.4</b>	<b>949</b>	<b>6.7</b>	<b>1,637</b>	<b>11.5</b>

<sup>1</sup> Source: 1997 Census of Agriculture, U.S. Department of Agriculture, National Agricultural Statistics Service.

<sup>2</sup> Percent of total farms for counties and percent of total farms for state. Percents may not add to 100.0 due to rounding.



### 1997 Census of Agriculture: Number of Farms by Total Land in Farms, by County, Utah 1

District and County	Total Land in Farms											
	1-9 Acres		10-49 Acres		50-179 Acres		180-499 Acres		500-999 Acres		1,000 Plus Acres	
	Farms	% 2	Farms	% 2	Farms	% 2	Farms	% 2	Farms	% 2	Farms	% 2
<b>Northern</b>												
Box Elder . . . . .	157	14.6	240	22.3	232	21.5	160	14.9	104	9.7	184	17.1
Cache . . . . .	189	15.3	330	26.8	373	30.3	223	18.1	68	5.5	49	4.0
Davis . . . . .	209	37.4	207	37.0	77	13.8	49	8.8	15	2.7	2	0.4
Morgan . . . . .	43	17.7	91	37.4	45	18.5	19	7.8	18	7.4	27	11.1
Rich . . . . .	13	8.0	20	12.3	21	13.0	22	13.6	28	17.3	58	35.8
Salt Lake . . . . .	296	49.9	172	29.0	72	12.1	30	5.1	6	1.0	17	2.9
Tooele . . . . .	58	17.5	77	23.2	70	21.1	50	15.1	27	8.1	50	15.1
Weber . . . . .	299	31.9	392	41.9	157	16.8	68	7.3	12	1.3	8	0.9
<b>Central</b>												
Juab . . . . .	13	5.7	39	17.1	55	24.1	47	20.6	23	10.1	51	22.4
Millard . . . . .	56	8.6	94	14.5	150	23.1	153	23.5	72	11.1	125	19.2
Sanpete . . . . .	76	9.8	195	25.1	219	28.2	142	18.3	75	9.7	69	8.9
Sevier . . . . .	66	13.8	146	30.5	147	30.8	75	15.7	19	4.0	25	5.2
Utah . . . . .	537	30.0	684	38.2	317	17.7	136	7.6	54	3.0	62	3.5
<b>Eastern</b>												
Carbon . . . . .	35	17.6	61	30.7	46	23.1	21	10.6	7	3.5	29	14.6
Daggett . . . . .	2	5.6	1	2.8	10	27.8	10	27.8	4	11.1	9	25.0
Duchesne . . . . .	64	7.9	176	21.7	246	30.3	181	22.3	74	9.1	70	8.6
Emery . . . . .	36	8.0	116	25.8	128	28.4	84	18.7	52	11.6	34	7.6
Grand . . . . .	23	27.1	22	25.9	13	15.3	14	16.5	2	2.4	11	12.9
San Juan . . . . .	8	3.5	21	9.1	36	15.6	39	16.9	29	12.6	98	42.4
Summit . . . . .	77	16.2	145	30.5	108	22.7	51	10.7	34	7.1	61	12.8
Uintah . . . . .	81	10.2	249	31.3	224	28.2	117	14.7	49	6.2	75	9.4
Wasatch . . . . .	52	17.7	127	43.2	73	24.8	25	8.5	8	2.7	9	3.1
<b>Southern</b>												
Beaver . . . . .	16	7.3	52	23.7	54	24.7	50	22.8	20	9.1	27	12.3
Garfield . . . . .	20	7.0	66	23.2	80	28.1	65	22.8	29	10.2	25	8.8
Iron . . . . .	41	10.9	79	21.1	69	18.4	57	15.2	37	9.9	92	24.5
Kane . . . . .	12	8.4	18	12.6	23	16.1	28	19.6	10	7.0	52	36.4
Piute . . . . .	4	3.8	9	8.5	27	25.5	40	37.7	17	16.0	9	8.5
Washington . . . . .	86	20.0	115	26.8	93	21.7	49	11.4	43	10.0	43	10.0
Wayne . . . . .	21	11.0	34	17.8	80	41.9	37	19.4	9	4.7	10	5.2
<b>State</b>												
<b>Total . . . . .</b>	<b>2,590</b>	<b>18.3</b>	<b>3,978</b>	<b>28.1</b>	<b>3,245</b>	<b>22.9</b>	<b>2,042</b>	<b>14.4</b>	<b>945</b>	<b>6.7</b>	<b>1,381</b>	<b>9.7</b>

1 Source: 1997 Census of Agriculture, U.S. Department of Agriculture, National Agricultural Statistics Service.

2 Percent of total farms for counties and percent of total farms for state. Percents may not add to 100.0 due to rounding.

**1997 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
	<i>Number</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Acres</i>	<i>Dollars</i>	<i>Dollars</i>
<b>Northern</b>								
Box Elder ..	1,077	1,357,734	1,261	343,797	174,615	137,074	547,243	437
Cache .....	1,232	266,374	216	177,117	119,910	93,008	329,665	1,742
Davis .....	559	67,906	121	27,034	17,808	21,907	376,424	3,296
Morgan .....	243	179,246	738	21,609	14,696	8,836	690,752	941
Rich .....	162	523,744	3,233	87,335	52,983	74,559	853,906	269
Salt Lake ..	593	113,912	192	40,035	20,319	14,647	431,460	2,092
Tooele .....	332	291,746	879	41,924	16,966	18,944	585,551	584
Weber .....	936	81,352	87	39,661	26,473	32,651	328,193	2,210
<b>Central</b>								
Juab .....	228	275,632	1,209	66,400	29,998	22,236	547,154	467
Millard .....	650	457,823	704	162,805	94,530	99,248	504,256	668
Sanpete ...	776	359,717	464	113,436	60,783	72,315	339,022	800
Sevier .....	478	147,032	308	49,723	34,169	43,728	235,044	931
Utah .....	1,790	374,933	209	149,920	86,976	81,168	433,198	2,244
<b>Eastern</b>								
Carbon .....	199	201,679	1,013	17,200	6,060	10,588	611,966	586
Daggett .....	36	26,485	736	13,128	7,676	7,840	471,861	641
Duchesne ..	811	1,328,307	1,638	125,134	56,971	114,790	520,668	310
Emery .....	450	158,798	353	53,303	20,922	41,198	220,169	683
Grand .....	85	75,801	892	6,001	3,254	4,472	438,883	492
San Juan ..	231	1,673,079	7,243	150,143	53,772	9,078	1,786,989	241
Summit .....	476	589,528	1,239	40,345	20,435	28,429	740,266	603
Uintah .....	795	2,268,090	2,853	90,524	44,954	83,939	695,186	244
Wasatch ...	294	106,142	361	16,569	9,295	15,424	563,657	1,544
<b>Southern</b>								
Beaver .....	219	130,994	598	39,463	28,209	35,177	649,388	1,102
Garfield .....	285	121,381	426	36,386	14,565	25,406	358,522	762
Iron .....	375	404,574	1,079	71,013	53,457	60,400	609,316	667
Kane .....	143	175,384	1,226	15,224	3,210	7,198	625,669	508
Piute .....	106	44,540	420	21,278	10,934	14,257	376,592	985
Washington	429	163,135	380	34,916	10,321	16,057	418,213	1,156
Wayne .....	191	59,593	312	18,328	13,667	17,627	319,677	1,080
<b>State</b>								
<b>Total</b> .....	<b>14,181</b>	<b>12,024,661</b>	<b>848</b>	<b>2,069,751</b>	<b>1,107,928</b>	<b>1,212,201</b>	<b>486,235</b>	<b>575</b>

1 Source: 1997 Census of Agriculture, U.S. Department of Agriculture, National Agricultural Statistics Service.

# Enterprise Budgets

Prepared by the Economics Department, Utah State University

The following crop and livestock enterprise budgets were prepared by personnel at Utah State University with input from farmers and ranchers. These budgets are provided to assist farmers and ranchers in evaluating alternatives that may increase the profitability of their operation. The costs and returns commonly vary for a particular farm or ranch from those shown. Therefore, a column has been provided to adapt the budget to reflect the costs and returns for a specific farm or ranch enterprise.

Questions concerning these budgets should be referred to the appropriate contact individual in the Economics department at Utah State University in Logan at 435-797-2310.

Budgets published in this and previous additions of Utah Agricultural Statistics as well as budgets for other crop and livestock enterprises may be found on the extension web page at Utah State University, <http://extension.usu.edu/agecon/>.

## Index of Enterprise Budgets by Subject and Year Most Recently Published in Utah Agricultural Statistics, 1993-2003

<i>Enterprise Budget</i>	<i>Most Recent Report Year</i>	<i>Enterprise Budget</i>	<i>Most Recent Report Year</i>
Alfalfa Hay, establishment with oat hay	1998	Dairy Bull	1998
Alfalfa Hay, establishment, Grand County	1994	Deer Hunt Pack Trip	1996
Alfalfa Hay, irrigated, East Millard County	2001	Elk	1997
Alfalfa Hay, dryland, Box Elder County	2002	Grass Hay	1998
Alfalfa Haylage, Millard County	2001	Lawn Turf	1997
Apples, Utah County	1994	Machinery data	1993
Barley, wheel-line irrigation, Cache County	2002	Manure & Waste Disposal, Dairy	1998
Beans - Dry edible, dryland		Oat Hay, San Juan County	2003
Beef Cattle		Oats, San Juan County	2003
Background feeder operation	1998	Onion Production, Box Elder County	2001
Beef heifer replacement	1998	Ostrich	1995
Cow/calf	1997	Pasture, irrigated	1995
Cow/calf, southern Utah	2000	Pasture, Native Meadow	1993
Cow/calf/yearling, Rich County	1996	Pasture Establishment	1995
Feeder cattle	2000	Peaches, Box Elder County	1994
Feeder steer calves	2003	Pheasants	1995
Finish cattle	2000	Potatoes, chipper, Box Elder County	1994
Bison, Cow/Calf, 50 Cows	2001	Pumpkin	1997
Canola, Spring irrigated	1996	Raspberry	1996
Cherries, Tart	1995	Safflower, dryland	1998
Corn for grain, Box Elder County	2002	Sheep, range	1997
Corn Silage, Cache County	2002	Soybean	1998
Corn, Sweet	1996	Swine, farrow to finish	1998
CRP Contract, per acre	2001	Swine, Hog Finishing	1993
Custom Operators Rates	1998	Tomatoes	2003
Dairy		Triticale	1996
Holstein Heifer Replacement	2001	Turkeys, Hen	2000
Jersey Heifer Replacement	2000	Watermelons	1996
Milk Cows, Jersey	1998	Wheat, dryland,	2003
Milk Cows, Holstein	1997	Wheat, Spring, irrigated	1994
Milk Cows, Holstein	2001	Wheat Straw Residue	1997
		Wheat, Soft White Winter, irrigated, Box Elder Co	2000

## Enterprise Budget: Feeder Steer Calves, 500 Steers, Utah 2002

Item	Unit	Number	\$/unit	Total	Per Head Sold	Your Farm
..... Dollars .....						
<b>Receipts:</b>						
Feeder Steers .....	Cwt	4,980	64.15	319,467	641.50	_____
Subtotal .....				319,467	641.50	_____
<b>Expenses:</b>						
Steers Purchased	Cwt	3,500	75.50	264,250	530.62	_____
<b>Feedd</b>						
Pasture .....	Head Months	1996	12.00	23,952	48.10	_____
Minerals .....	Tons	2	240.00	480	0.96	_____
<b>Other</b>						
Vet & Medicine .....	Head		1.00	500	1.00	_____
Vaccination .....	Head		2.50	1,250	2.51	_____
Parasite Control .....	Head		1.40	700	1.41	_____
Fly tag .....	Head		1.50	750	1.51	_____
Transportation .....	Head		9.00	4,500	9.04	_____
Commission .....	Head		3.00	1,500	3.01	_____
Brand Inspection .....	Head		1.00	500	1.00	_____
Supplies .....	Head		2.00	1,000	2.01	_____
Fuel and Lube .....	Head		3.00	1,500	3.01	_____
Hired Labor .....	Days	10	120.00	1,200	2.41	_____
Repairs .....	Head		1.00	500	1.00	_____
Miscellaneous .....	Head		1.00	500	1.00	_____
Operating interest for 4 months at 10%				9,529	19.13	_____
<b>Subtotal</b>				312,611	627.73	_____
<b>Non-cash expenses (depreciation)</b>						
Fences and corrals			2.00	1,000	2.01	_____
Equipment			2.00	1,000	2.01	_____
Horses			1.00	500	1.00	_____
Water Systems			2.00	1,000	2.01	_____
<b>Subtotal</b>				3,500	7.03	_____
<b>Total Expenses</b>				316,111	634.76	
<b>Net returns to operator labor, management, and equity capital</b>				<b>3,356</b>	<b>6.74</b>	
<b>Assumptions</b>						
Initial number of feeders		500				
Death loss		2				
Calves are purchased		1-May				
Calves are sold		1-Sept				
Purchase weight		700				
Sale weight		1000				

Budget prepared by E. Bruce Godfrey and Shane Ellis,

## Enterprise Budget: Oat Hay - San Juan County, Utah - 2002

Item	Unit	Quantity per acre	\$/unit	Value/Cost per Acre	Your Farm
				Dollars	
<b>Receipts:</b>					
Oat hay	Tons	2.10	57.50	120.75	
<b>Total Receipts</b>				120.75	
<b>Variable Operating Costs</b>					
<b>Land Preparation</b>					
Plowing	Acre	1	10.11	10.11	
Discing	Acre	1	3.27	3.27	
Land plane	Acre	2	3.29	6.58	
Planting	Acre	1	5.21	5.21	
Seed	Pounds	70	0.20	14.00	
<b>Fertilization</b>					
Nitrogen (34-0-0)	Pounds	205	0.11	22.55	
Phosphate (11-52-0)	Pounds	48	0.12	5.76	
Custom application	Acre	1	5.00	5.00	
<b>Pesticides/Herbicides</b>					
2-4-D/Amine	Pint	1.25	2.26	2.83	
Custom application	Acre	1	5.00	5.00	
<b>Irrigation (wheel line)</b>					
Labor	Hours	0.67	9.00	6.00	
Water assessment	Share	1	10.00	10.00	
Repairs/maintenance	Acre	1	1.50	1.50	
Pumping	Acre inch	24	0.50	12.00	
<b>Harvesting</b>					
Swathing	Acre	1	3.60	3.60	
Turning	Acre	1	4.23	4.23	
Baling	Acre	1	2.48	2.48	
Hauling	Large bale	2.5	1.91	4.86	
Crop Insurance	Acre			0.00	
Interest on operating capital @ 9.75%				4.48	
<b>Total Variable Operating Costs</b>				129.46	
<b>Ownership costs (excludes cost of</b>					
Farm Insurance	Acre	1	2.00	2.00	
Machinery	Acre	1	50.52	50.52	
Irrigation equipment	Acre	1	8.25	8.25	
<b>Total All Expenses</b>				190.23	
<b>Net returns to owner for unpaid labor, management, equity and risk</b>					
above operating costs				-8.71	
above total costs				-69.48	

**Assumptions:**

Grain planted in March and harvested in July.

Interest computed on land preparation and planting costs for 10 months and fertilization/ herbicide/irrigation costs for 3 months.

Machinery operating costs include: fuel, oil, repairs, and labor.

Machinery costs are based on 30 acres of oat hay.

Machinery ownership costs include depreciation, interest, insurance, and housing.

Budget prepared by E. Bruce Godfrey, Shane Ellis, and Jim Keyes.

## Enterprise Budget: Costs & Returns Per Acre From Growing Oats - San Juan County - 2003

Item	Unit	Quantity per acre	\$/unit	Value/Cost per Acre	Your Farm
				Dollars	
Receipts:					
Oats .....	Bushels	86	2.50	215.00	
Straw .....	Tons	0.60	40.00	24.00	
<b>Subtotal</b>				<b>239.00</b>	
Variable Operating Costs					
Land Preparation					
Plowing .....	Acre	1	10.11	10.11	
Discing .....	Acre	1	3.27	3.27	
Landplane .....	Acre	2	3.29	6.58	
Planting .....	Acre	1	5.21	5.21	
Seed .....	Pounds	70	0.20	14.00	
Fertilization					
Nitrogen (34-0-0) .....	Pounds	205	0.11	22.55	
Phosphate (11-52-0) .....	Pounds	48	0.12	5.76	
Custom application .....	Acre	1	5.00	5.00	
Pesticides/Herbicides					
2-4-D .....	Pints	1.25	2.26	2.83	
Custom application .....	Acre	1	5.00	5.00	
Irrigation (wheel line)					
Labor .....	Hours	1.33	9.00	12.00	
Water assessment .....	Share	1	10.00	10.00	
Repairs/maintenance .....	Acre	1	1.50	1.50	
Pumping .....	Acre inch	24	0.50	12.00	
Harvesting					
Combining .....	Acre	1	26.00	26.00	
Haul grain (custom) .....	Bushel	86	0.12	10.32	
Baling .....	Acre	1	3.59	3.59	
Haul Straw .....	Large Bale	1.20	1.91	2.29	
Crop Insurance .....				0.00	
Interest on operating capital @ 9.75% .....				4.77	
<b>Subtotal</b>				<b>162.78</b>	
Ownership costs (excludes cost of				58.61	
Farm Insurance .....	Acre	1	2.00	2.00	
Machinery ownership .....	Acre	1	48.36	48.36	
Irrigation equipment .....	Acre	1	8.25	8.25	
Total Listed Costs .....				221.39	
Net returns to owner for unpaid labor, management, equity and risk					
above operating costs .....				76.22	
above total costs .....				17.61	

**Assumptions:**

Grain planted in March and harvested in July.

Interest computed on land preparation and planting costs for 10 months and cultivation/fertilization, herbicide/irrigation costs for 3 months.

Machinery operating costs include: fuel, oil, repairs, and labor.

Machinery costs are based on 13 acres of oats.

Machinery ownership costs include depreciation, interest, insurance, and housing.

Budget prepared by E. Bruce Godfrey, Shane Ellis, and Jim Keyes

## Enterprise Budget: Dryland Wheat Budget - 2002

Item	Unit	Quantity	\$/unit	Value/Cost per Acre	Your Farm
				Dollars	
<b>Receipts:</b>					
Wheat .....	Bushels	22	3.40	74.80	_____
Insurance Indemnity payment .....				13.39	_____
	<b>Total</b>			88.19	_____
<b>Purchases</b>					
2-4-D .....	Pints	1.25	2.56	3.20	_____
Seed .....	Pounds	70	0.16	11.20	_____
<b>Operations</b>					
Chisel Plow & Harrow .....	Operation	2	3.58	7.16	_____
Culti-weed & Harrow .....	Operation	2	2.91	5.82	_____
Planting .....	Operation	1	2.46	2.46	_____
Multi Peril Crop Insurance .....				4.41	_____
Herbicide Application .....	Acre	Custom Rate @	4.00	4.00	_____
Combining .....	Acre	Custom Rate @	20.00	20.00	_____
Hauling .....	Bushel	Custom Rate @	0.14	3.08	_____
Interest on operating capital		9 months @	8.50%	2.44	_____
Allocated Costs					
(Machinery Depreciation, Insurance & Housing) .....				19.04	_____
<b>Total Listed Costs</b> .....				<b>82.81</b>	_____
<b>Return to Land and Management</b>				<b>5.38</b>	

**Assumptions:**

- Half of farm summer fallowed each year
- Total Acres: 1280
- Labor Rate including FICA (\$/hour) = \$15
- Primary implements used
  - 300 HP 4WD Tractor
  - 36 foot Culti Weeder
  - 36 foot Grain Drills
  - 30 foot Chisel Plow
- Insurance indemnity payment
  - Actual Production history = 35 bushels
  - 75 percent coverage
  - Price Election = \$3.15

Budget prepared by E. Bruce Godfrey

## Enterprise Budget: Costs & Returns Per Acre From Growing Tomatoes - 2003

Item	Unit	Quantity per acre	\$/unit	Value/Cost per Acre	Your Farm
				Dollars	
Receipts:					
Tomatoes .....	Cwt	200	24.00	4,800.00	
<b>Subtotal</b>				4,800.00	
Variable Operating Costs					
Land Preparation					
Plowing, Disking & Harrowing (custom)	Acre	1	18.00	18.00	
Seed Bed Maker .....	Acre	1	15.04	15.04	
Furrow & Cultivate (custom) .....	Acre	3	10.00	30.00	
Planting <sup>1</sup> .....	Acre	1	203.38	203.38	
Plants .....	Plant	5,808	0.10	580.80	
Fertilization					
11-34-0 .....	Pounds	300	0.11	33.00	
Custom application .....	Acre	1	6.50	6.50	
Pesticides/Herbicides					
Treflan .....	Quart	1	18.49	18.49	
Sevin .....	Quart	1	16.05	16.05	
Custom application .....	Acre	2	15.00	30.00	
Irrigation (flood)					
Labor <sup>2</sup> .....	Times	10	18.25	182.81	
Water assessment .....	Share	10	1.00	10.00	
Harvesting					
Boxes (20%) .....	Each	40	1.10	44.00	
Picking .....	Hours	148	7.31	1,082.25	
Hauling .....	Miles	204	0.50	102.00	
Baskets .....	Each	20	3.00	60.00	
Grading/Sorting .....	Cwt	40	2.00	80.00	
Advertising .....	Acre	1	100.00	100.00	
Interest on operating capital @ 9.75% <sup>3</sup>				50.38	
<b>Subtotal</b>				2,662.70	
Ownership costs (excludes cost of land)					
Farm Insurance .....	Acre	1	2.00	2.00	
Machinery					
Planter <sup>4</sup> .....	Acre	1	161.00	161.00	
Seedbed Maker <sup>4</sup> .....	Acre	1	285.13	285.13	
Tractor .....	Hours	6.5	17.32	112.58	
<b>Total Costs</b>				3,223.40	
Net returns to owner for unpaid labor, management, equity and risk					
above operating costs .....				2,137.30	
above total costs .....				1,576.60	

Assumptions:

1. Planting costs include fuel, 1 tractor operator \$11.25 per hour plus 3 workers at \$7.31 per hour for 5.5 hours.
2. Irrigation labor is for 2.5 hours each time at \$6.50 per hour plus 12.5% benefits.
3. Interest computed on plowing for one year, other land preparation for 6 months and herbicide/irrigation costs for 3 months.
4. Machinery costs are based on 5 acres of tomatoes.

Budget prepared by : Ruby Ward with input from producers in Box Elder and Salt Lake Counties.



# Per Capita Consumption of Major Food Commodities: United States, 1991-2001 <sup>1</sup>

Commodity	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001
Red meats <sup>1 2 3</sup>	113.4	111.2	113.5	113.6	111.0	109.0	113.2	115.1	113.7	111.3
Beef	92.4	61.0	62.9	63.5	64.0	62.6	63.6	64.3	64.5	63.1
Veal	0.8	0.8	0.8	0.8	1.0	0.8	0.7	0.6	0.5	0.5
Lamb & mutton	1.0	1.0	0.9	0.9	0.8	0.8	0.9	0.8	0.8	0.8
Pork	49.1	48.5	49.0	48.4	45.2	44.7	48.2	49.3	47.8	46.9
Poultry <sup>2 3 4</sup>	60.4	62.0	62.6	62.1	63.1	63.1	63.7	66.7	66.9	66.2
Chicken	46.4	48.1	48.7	48.2	48.8	49.4	49.7	52.8	53.2	52.4
Turkey	14.0	13.9	13.9	13.9	14.3	13.6	13.9	13.8	13.7	13.8
Fish and shellfish <sup>3</sup>	14.6	14.8	15.0	14.8	14.5	14.3	14.5	14.8	15.2	14.7
Eggs <sup>4</sup>	30.1	30.1	30.3	29.9	30.1	30.2	30.7	32.1	32.2	32.4
Dairy products										
Cheese (excluding cottage) <sup>2 5</sup>	25.9	26.0	26.5	26.9	27.3	27.5	27.8	29.0	29.8	30.0
American	11.3	11.3	11.4	11.7	11.8	11.8	11.9	12.6	12.7	12.8
Italian	9.9	9.7	10.2	10.3	10.6	10.8	11.1	11.6	12.0	12.3
Other Cheese <sup>6</sup>	4.7	5.0	5.0	5.0	4.9	4.9	4.7	4.9	5.1	4.9
Cottage cheese	3.1	2.9	2.8	2.7	2.6	2.6	2.7	2.6	2.6	2.6
Beverage milks <sup>2</sup>	216.3	210.8	209.3	206.3	205.4	201.9	198.5	197.6	193.8	189.8
Fluid whole milk <sup>7</sup>	83.2	79.1	77.2	74.0	73.0	71.0	69.5	70.1	69.2	67.2
Fluid lower fat milk <sup>8</sup>	108.3	105.4	103.9	100.9	99.5	97.4	95.6	95.3	94.7	93.8
Fluid skim milk	24.8	26.3	28.2	31.4	32.9	33.5	33.4	32.2	29.9	28.8
Fluid cream products <sup>9</sup>	7.9	7.9	7.9	8.3	8.5	8.8	8.9	9.4	9.8	10.6
Yogurt (excluding frozen)	4.5	4.9	5.3	6.2	5.9	5.8	5.9	6.2	6.5	7.0
Ice cream	16.2	16.0	16.0	15.5	15.6	16.1	16.3	16.7	16.6	16.3
Lowfat ice cream <sup>10</sup>	7.0	6.9	7.5	7.4	7.5	7.8	8.1	7.5	7.3	7.3
Frozen yogurt	3.1	3.5	3.4	3.4	2.5	2.0	2.1	1.9	1.8	1.5
All dairy products, milk equivalent, milkfat basis <sup>11</sup>	562.6	569.3	579.7	576.2	566.2	567.2	572.4	584.6	592.8	587.2
Fats and oils – total fat content	66.4	69.1	67.3	65.4	64.2	63.7	64.3	67.0	74.5	--
Butter & margarine (product weight)	15.2	15.6	14.6	13.5	13.3	12.5	12.6	12.6	12.8	--
Shortening	22.3	24.9	23.9	22.2	21.9	20.5	20.5	21.1	23.1	--
Lard & edible tallow (direct use)	3.5	3.4	4.2	4.3	4.6	4.0	5.1	5.6	5.9	--
Salad & cooking oils	27.0	26.6	25.9	26.5	25.7	28.0	27.3	28.8	33.7	--
Fruits and vegetables <sup>12</sup>	676.8	687.8	691.2	690.6	700.5	708.4	696.7	698.3	705.4	688.7
Fruit	282.1	280.6	278.4	283.3	283.1	290.3	283.9	284.6	280.3	275.7
Fresh fruits	122.8	123.5	124.9	122.5	122.5	129.4	128.8	129.6	127.2	125.8
Canned fruit	22.8	20.5	20.7	17.3	18.5	20.1	17.0	19.2	17.5	17.7
Dried fruit	10.7	12.5	12.7	12.6	11.1	10.6	12.1	10.1	10.4	10.2
Frozen fruit	4.2	3.6	3.1	4.6	4.2	3.5	4.0	4.4	3.1	5.9
Selected fruit juices	121.1	120.1	116.6	126.0	123.0	126.1	121.6	120.8	121.8	115.8
Vegetables	394.6	407.2	412.8	407.2	417.4	418.0	412.9	413.7	425.1	412.9
Fresh	173.9	180.7	186.5	180.9	185.9	190.1	186.5	191.3	200.4	196.6
Canning	110.6	110.1	109.8	108.0	106.3	105.4	105.3	102.8	103.0	97.1
Freezing	70.5	75.3	77.5	78.8	83.3	81.5	80.4	80.9	79.6	78.2
Dehydrated and chips	31.4	33.4	30.7	30.9	33.9	32.7	32.5	30.6	33.8	33.3
Pulses	8.3	7.7	8.2	8.5	8.0	8.3	8.2	8.1	8.4	7.8
Peanuts (shelled)	6.2	6.0	5.7	5.6	5.6	5.7	5.8	6.0	5.7	--
Tree nuts (shelled)	2.2	2.3	2.3	1.9	1.9	2.1	2.2	2.5	2.5	2.2
Flour and cereal products <sup>13</sup>	184.6	189.1	191.8	190.2	196.2	197.3	194.2	195.5	199.8	195.7
Wheat flour	138.0	142.1	142.9	140.0	146.4	146.8	143.0	142.6	146.3	140.9
Rice (milled basis)	16.7	16.6	18.0	18.6	17.6	18.1	18.3	19.5	19.6	20.2
Caloric sweeteners <sup>14</sup>	136.1	139.1	141.5	143.8	145.0	148.1	149.1	151.3	148.9	147.1
Coffee (green bean equiv.)	10.0	9.0	8.1	7.9	8.7	9.1	9.3	9.8	10.3	9.4
Cocoa (chocolate liquor equiv.)	4.5	4.3	3.8	3.6	4.2	4.0	4.3	4.5	4.7	4.5

--=Not available. <sup>1</sup> In pounds, retail weight unless otherwise stated. Consumption normally represents total supply minus exports, nonfood use, and ending stocks. Calendar-year data, except fresh citrus fruits, peanuts, tree nuts, and rice, which are on crop-year basis. <sup>2</sup> Totals may not add due to rounding. <sup>3</sup> Boneless, trimmed weight. Chicken series revised to exclude amount of ready-to-cook chicken going to pet food as well as some water leakage that occurs when chicken is cut up before packaging. <sup>4</sup> Excludes shipments to the U.S. territories. <sup>5</sup> Whole and part-skim milk cheese. Natural equivalent of cheese and cheese products. <sup>6</sup> Includes Swiss, Brick, Muenster, cream, Neufchatel, Blue, Gorgonzola, Edam, and Gouda. <sup>7</sup> Plain and flavored. <sup>8</sup> Plain and flavored, and buttermilk. <sup>9</sup> Heavy cream, light cream, half and half, eggnog, sour cream, and dip. <sup>10</sup> Formerly known as ice milk.

<sup>11</sup> Includes condensed and evaporated milk and dry milk products. <sup>12</sup> Farm weight. <sup>13</sup> Includes rye, corn, oats, and barley products. Excludes quantities used in alcoholic beverages, corn sweeteners, and fuel. <sup>14</sup> Dry weight equivalent.

Source: Economic Research Service/USDA - Agricultural Outlook/June-July 2002; Information contact: Jane E. Allshouse (202) 694-5449

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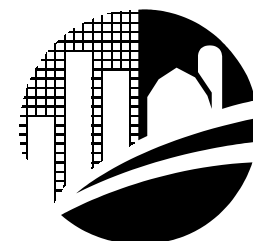
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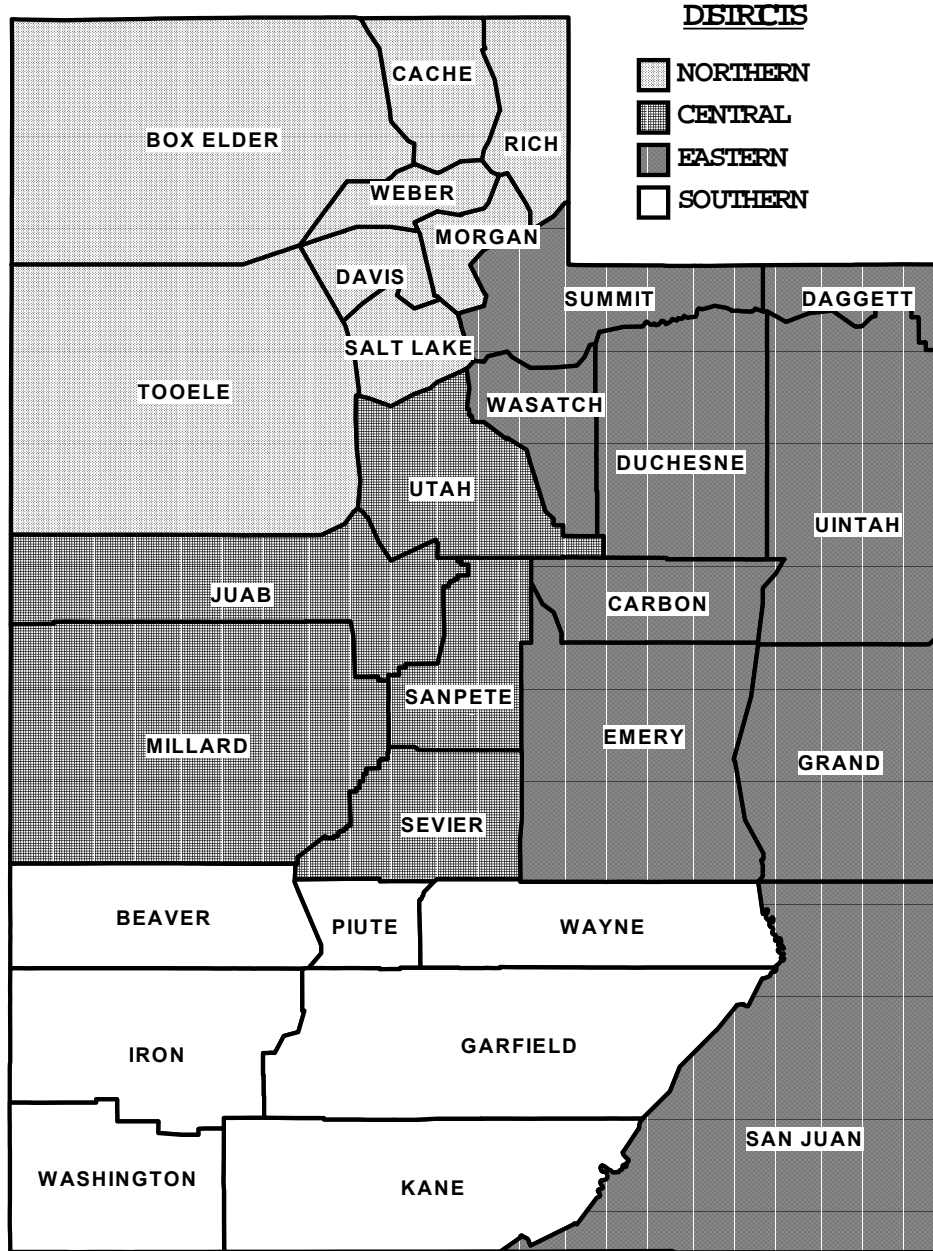
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