Editors' Preface

By Dr. Walter E. Hecox and Elizabeth L. Kolbe

The 2010 Colorado College State of the Rockies Report Card

Agriculture and the Rockies region have a symbiotic relationship. Agriculture depends on the land, water, and environment while simultaneously shaping settlement patterns, demographics, economic prosperity, and land use. The 2007 Agricultural Census, released in 2009, reveals gradual changes in agriculture in both the Rockies and the nation. Over the five years from the 2002 Agricultural Census, the number of farms and ranches grew, with these new operations demonstrating more diversified production, fewer average acres, lower sales, and younger operators - many of whom also work off the farm. The same five years brought a more demographically diverse range of U.S. farm operators, with significantly more women and minority groups as principal operators. By 2007 one-third of farms were classified as residential/lifestyle farms, with sales of less than \$250,000 and operators primarily working outside farming; another onefourth of farms were small and operated by retirees. While the number of small farms has increased, mega-agricultural enterprises are taking center stage in farm production, and new products are matching changing food preferences. The result: a dynamic landscape of agriculture and food throughout the eight-state Rockies region.

Rockies landforms have shaped and defined agriculture, with patterns of food and crops impacting rural communities, open spaces, water diversions, and transportation networks to major cities and elsewhere. All have evolved along with the region's agricultural heritage into the "wide-open spaces" we connect with the character of the Rockies. This synergism was true in the earliest decades of settlement in the American West and is still true today.

It would be remiss to measure the importance of agriculture today solely by its contribution to regional employment or income, which only totals a few percent nationally and in the Rockies. Over the past century, technological advancements in transportation, agricultural machinery, water conveyance, fertilizer, herbicides, and pesticides have contributed to abundant crop productivity and variety, a bounty so vast that even as employment dwindles to single digit levels, surpluses often create a glut at markets and require federal government programs. Agriculture's importance reaches far beyond sheer numbers of employees or shares of regional income. Agriculture should be considered an essential force in "cultivating open spaces" for wildlife habitat, riparian health, and the solace millions gain from these apparent "empty" places. Neither "empty" nor neglected, the

rural fabric of the Rockies derives directly from the magnitude and health of agriculture. We allow agriculture to dwindle and become marginalized at our region's socioeconomic and environmental peril.

Now in its seventh year, the State of the Rockies Project has chosen a single focus for our summer 2009 research and linked sections of the 2010 Report Card: food and agriculture in the Rockies. Thanks to continued generous funding, we selected a team of six student researchers to engage in summer research and field exploration, resulting in the research reports contained in this annual Report Card. Bringing new data and perspectives to foundational data from the 2007 Agriculture Census, we have set out to review current magnitudes and recent trends in key parts of food and agriculture in the Rockies: land, people, production, organization, and finances. The student researchers spent the summer developing their respective sections through scholarly research, discussions, and interviews.

Several field trips throughout Colorado, New Mexico, and Arizona complemented campus lab work, making possible selected case studies that "bring alive" aspects of Rockies agriculture. Traveling 1,800 miles, researchers saw not only the diverse land, people, and culture of the Rockies region, but also the myriad agricultural enterprises.

Beginning down I-25, the first stop for the Rockies' team was Javernick Family Farms, a 70-acre "beyond organic" establishment that raises vegetables, flowers, and beef in Cañon City, Colorado. The Rockies Project then visited Chile River Farm near Hatch, New Mexico. Though it was too soon for their world-famous chiles, the onion harvest was in full swing. The Rockies team left Hatch with burning mouths, some new friends, and 150 pounds of onions. Before leaving the area, the Rockies Project toured the Las Uvas Valley Dairy, one of the largest dairies in the United States. Loren Horton led the tour of the facility, including the 24-hour milking stations frequented by 15,000 cows.

The group made their way to Douglas, Arizona, to join the Malpai Borderlands Group for their annual meeting. The Malpai Group is a coalition of ranchers, environmentalists, and government employees who work together to ensure the sustainability of ranchlands in the area. On the way back north, the Rockies Project stopped in Marana, Arizona, at the cotton fields of Jon Post. In addition to cotton production techniques, Post discussed labor challenges and commodity market policy with the students and staff.

Back in Colorado, the research team spent a day at the Medano-Zapata Ranch in the San Luis Valley learning about sustainable cattle ranching and bison ranching techniques. The last research stop was at Aurora Organic Dairy near Mead, Colorado. The dairy was converted to organic in 2003 and now produces, pasteurizes, and bottles 5,000 gallons of milk every day.

From mountains to rivers to deserts, from one green chile to the next mole, researchers learned about challenges and progress in Rockies' agriculture, how citizens are working to shape the future, and how Colorado College students and the State of the Rockies Project fit into the warp and weft of the Rocky Mountain region.

In addition to the data analysis and field interviews presented in the main sections, the 2010 Report Card includes graphical depictions of various "footprints" for food and agriculture. The sketches help highlight dimensions of agricultural production as we think about agriculture's impacts on human diets, water, land, energy, and climate.

Making the best of the financial challenges faced nationwide during 2009, we have merged the traditional Rockies April Conference with a monthly speaker series, bringing experts to Colorado Springsthroughout the academic year to share perspectives on "Food and Agriculture in the Rockies: Current Challenges and New Trends" with the campus and community. Capacity attendance has been evidence of how deeply people of all ages care about their food and the types of agriculture which produce that food. Our speakers have included Dr. William Weida, President of the Socially Responsible Agricultural Project; Dan Morgan and Elaine Shannon, both journalists of long-time affiliation with the Washington Post and other national publications; Dr. Rosamond Naylor, Director of the Stanford University Program on Food Security and the Environment; Richard Manning, awardingwinning author and journalist; and Dr. Bonnie Lynn-Sherow, professor of history at Kansas State University.

Maintaining continuity with previous years' *Report Cards*, we have updated and begun this year's publication with "the Rockies Baseline," examining trends and latest data on key, annually updated demographic indicators for the U.S., the Rockies region, and each of the eight Rockies states. This Baseline helps readers orient themselves to basic facts and trends in this vast, rapidly changing region.

Central to this year's activities, as in the past, are the three goals of the Colorado College State of the Rockies Project:

- RESEARCH: To involve Colorado College students as the main contributors to the *Report Card* and conferences.
- REPORT: To produce an annual research document on critical issues of community and environment in the Rocky Mountain West (the Report Card); and
- ENGAGE: To host an annual monthly speaker series at Colorado College, bringing regional experts together with concerned citizens.

Through these goals, the Rockies Project and Colorado College aim to inspire *Report Card* readers and Rockies events attendees to creatively contemplate, discuss, and engage in shaping the future of our beloved, beautiful, and fragile region—the Rocky Mountain West. Enjoy!

