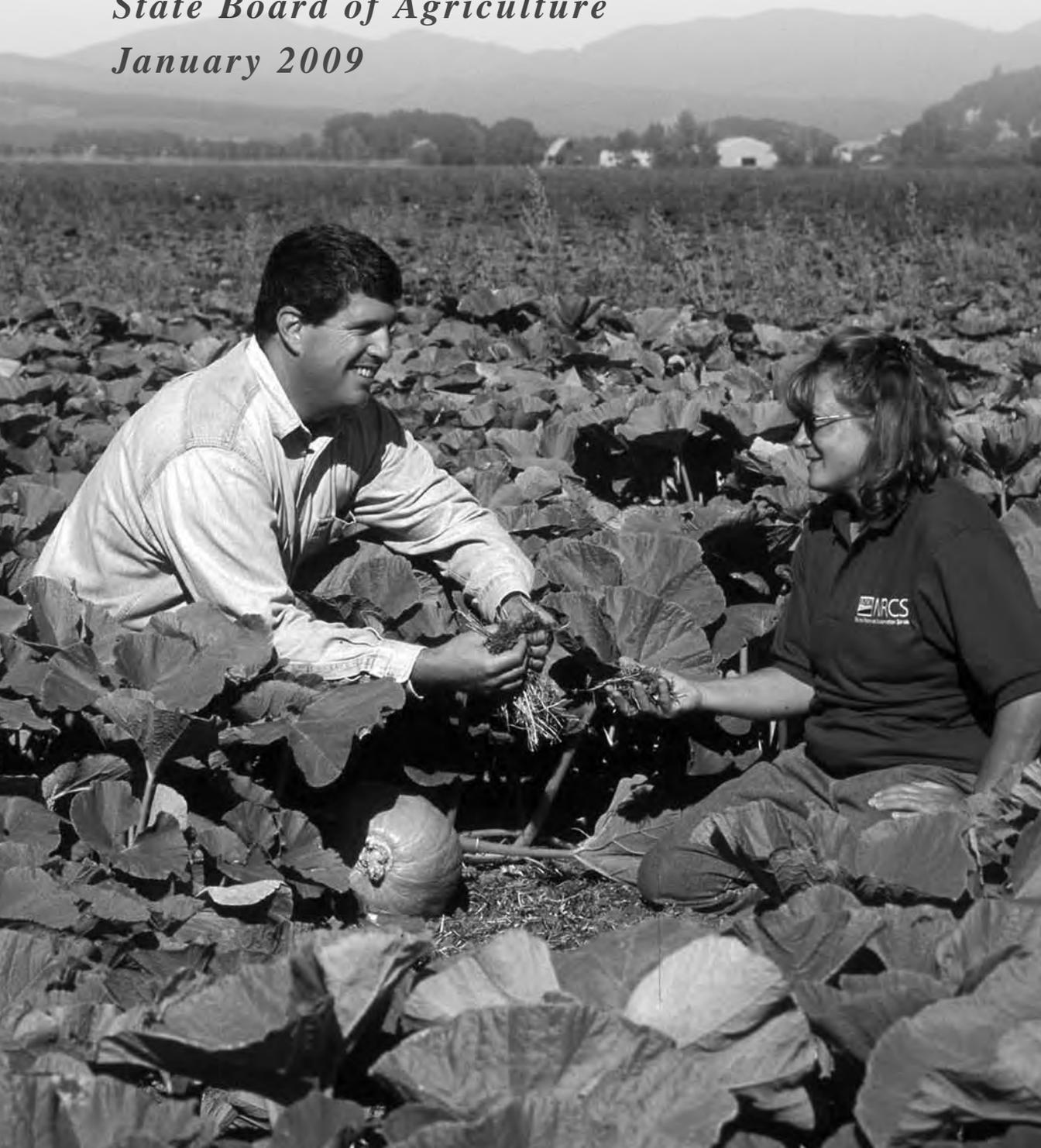
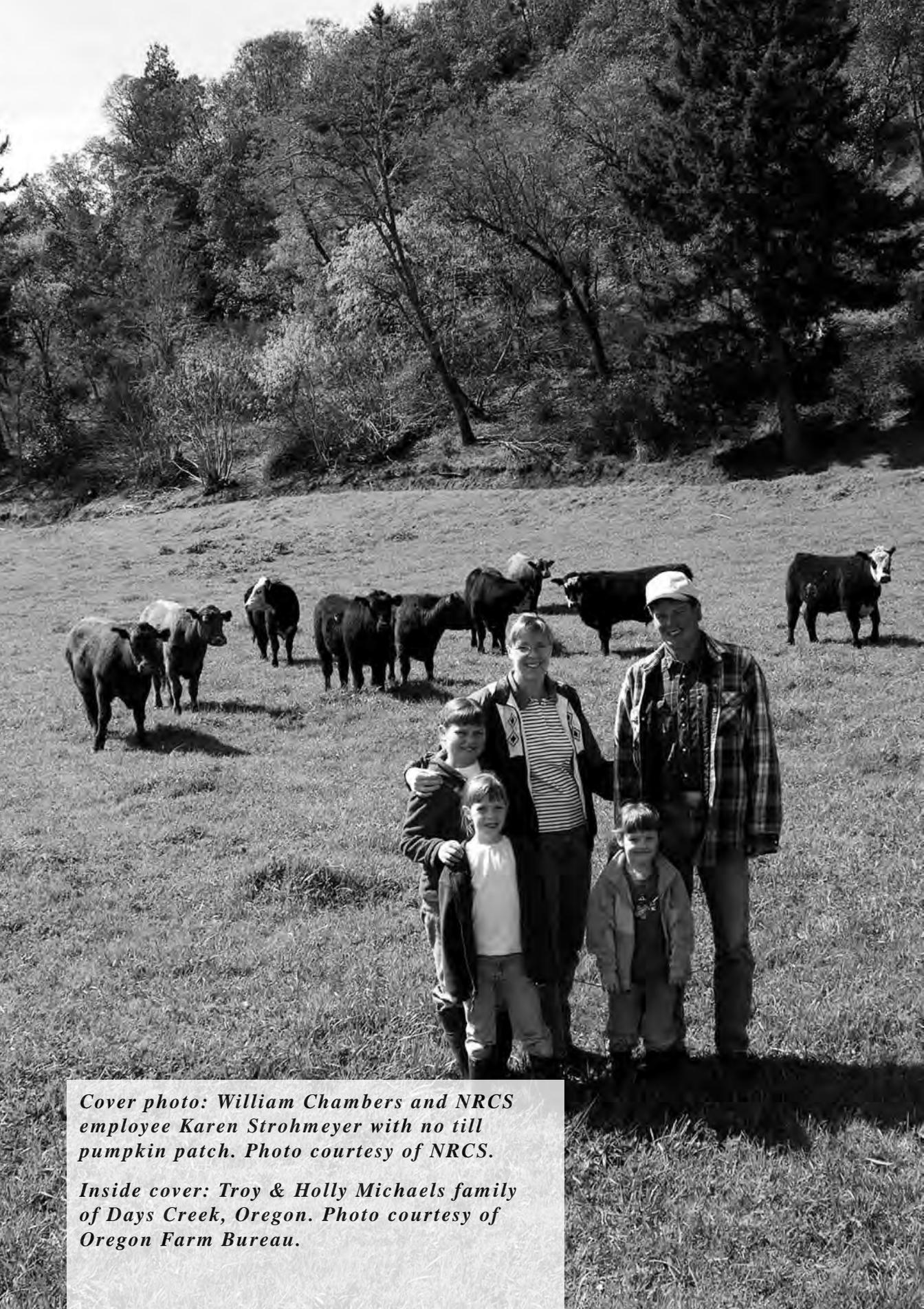


STATE OF OREGON AGRICULTURE

*Industry Report from the
State Board of Agriculture
January 2009*





Cover photo: William Chambers and NRCS employee Karen Strohmeyer with no till pumpkin patch. Photo courtesy of NRCS.

Inside cover: Troy & Holly Michaels family of Days Creek, Oregon. Photo courtesy of Oregon Farm Bureau.

ABOUT THIS REPORT

About this report

Oregon agriculture is a dynamic, complex industry. There are many issues, challenges, and opportunities facing our farm and ranch communities. People and business rely on a healthy agriculture to sustain the Oregon way of life. As a representative of this great and diverse industry, the State Board of Agriculture recognizes this report cannot address all issues and developments. But the board has focused on a dozen key factors that it feels are the highest priorities.

You will see at least three constant themes throughout this report: Oregon agriculture's diversity and complexity, the industry's dedication to sustainability, and the direct relationship agriculture has with all Oregonians. We hope that the industry report fosters a better understanding and appreciation of Oregon agriculture, and a chance for all Oregonians to join together to address these key issues.

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STATE BOARD OF AGRICULTURE



*Board of Agriculture members
Dan Carver and Doug Kraemer
with Steve Wagner of Skylane Farms.*

STATE BOARD OF AGRICULTURE

State Board of Agriculture subcommittees

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- Biennial Report to the Legislature
- Labor and minimum wage
- Farm Bill
- Legislative contacts and issues
- Governor's Office

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- International markets
- Transportation
- Sustainability
- Farmers' markets
- Agricultural business development
- Farm-to-School Program

Natural resources

- Water quality
- Water availability
- Long-term water strategy
- Air quality
- Global Warming Commission

Land use

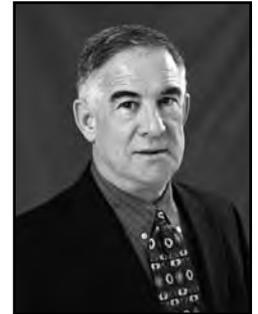
- Land use policy
- Big Look Task Force
- Interim review of land use system

The State Board of Agriculture advises the Oregon Department of Agriculture about programs, policies, and issues affecting Oregon agriculture.

Contact: Madeline MacGregor, 503-986-4758



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INDUSTRY OVERVIEW



INDUSTRY OVERVIEW

Agriculture is undergoing a renaissance. The public's awareness of agriculture and its concern over food, natural resources, and renewable energy has brought Americans together with agriculture in a way unprecedented in recent history.

Those involved in Oregon agriculture are guided by values and principles that keep the industry sustainable—economically, environmentally, and socially. New management practices and techniques are constantly adopted to cut costs and generate a higher net income. Farmers and ranchers demonstrate sound stewardship of the land and water that sustains their way of life. Keeping agriculture viable preserves a community and rural heritage that all Oregonians value.

Agriculture is incredibly complex and can't be easily explained. The industry both impacts and is impacted by a large number of factors, making it impossible to single out reasons for consumer high prices or high costs for producers. However, a few key developments have converged to create the current state of agricultural affairs.

Food demand is surging worldwide, incomes in export markets are rising, and biofuels are playing an important role in energy. All combined in 2007-08 to create some of the highest market prices farmers have seen in several decades. In some cases, records have been set.

A surprising turn in the US and world economy has flipped many commodity markets upside down. Prices

in late 2008 were 30 to 50 percent less than their peak just a few months earlier. Fortunately, fuel and fertilizer prices retreated as well.

On the consumer side, food prices have increased worldwide due to many of the same factors. World population growth and rising incomes are driving demand for more proteins and meats in China and India. A weak US dollar, skyrocketing energy prices, and production failures around the world have all contributed to higher food prices.

Despite the recent fall in commodity prices, food prices are unlikely to fall to the same level. This is because farm commodity prices account for a relatively small percentage of retail prices—they were not the primary driver going up, and won't be the anchor

The diversity of Oregon agriculture is demonstrated in the following chart of three Oregon county agricultural profiles (2004 data) compiled by Oregon State University.	 Tillamook	 Sherman	 Malheur
Number of farms	333	210	1,272
Land in farms (acres)	39,526	507,705	1,175,280
Land in farms (%)	5.60	96.40	18.60
Average farm size (acres)	119	2,418	924
Market value of land & buildings (\$000)	557,675	187,605	699,988
Average value/acre (\$)	14,109	370	596
Total net farm income from operations (\$000)	25,000	6,051	37,053
Average income/farm (\$000)	75	29	29
Average income/acre (\$)	632	12	32
Average income/acre divided by average value/acre (%)	4.48	3.23	5.29
Jobs directly employed in farm production (%)	7.76	27.16	23.77

Sources: U.S. Department of Agriculture, *2002 Census of Agriculture—County Data*, June 2004; and Minnesota Implan Group, Inc. IMPLAN 2004 Data.

pulling them down. Lower fuel prices will help temper food price increases, but credit, labor, electricity, packaging, and other costs continue to move upward and pressure retail prices.

The price of certain commodities significantly impacts poor nations, but even developed countries feel the effect of high food prices. The perfect storm of food price calamity did not happen overnight. Many factors over several decades—including the lack of investment in agricultural research, production, and infrastructure—have contributed to the situation.

Corn, wheat, soy, meats, and other US food products were exported at record levels in 2007-08 as foreign shoppers found bargain prices because of the US dollar's lower value. This contributed to further pressure on the US domestic supply of animal feeds and foods.

Oil prices drive much of the increase in the cost of goods, including food, over the past few years. Fertilizer prices have doubled in the past three years because of rising natural gas prices. Record high feed costs hobble the livestock industry. But these factors are in constant fluctuation.

The net result for farmers in Oregon and nationwide for 2007 and 2008 was record high revenues, record high expenses, and record high net income. The net farm income, however, is not evenly distributed among producers. Income to farmers varies greatly, depending on the products grown, input costs, and economic factors at the time of sale.

Good climate and soils make Oregon a great place to produce more than 250 commodities. Oregon farms are just as diverse, ranging from a few acres to thousands of acres in size. But nearly all are family farms. About 85 percent Oregon farms are

operated by sole proprietors. Another 10 to 12 percent are organized as family partnerships or family corporations. Less than 2 percent of Oregon farms are non-family corporate entities. "Farmer owned, farmer grown" is a good slogan for Oregon agricultural production.

The Oregon agriculture industry saw a mixed bag of results in 2007 and 2008, with some commodities doing well, others in a struggle.

Blueberries set another record high production of 50 million pounds. More than 400 growers now produce the blue jewel. Blueberry production has increased 100 percent in the past three years. However, there are signs that the market may become saturated.

Wheat acreage in the Willamette Valley increased from 25,000 acres in 2007 to more than 120,000 acres in 2008 due to higher market prices. Next year's wheat acreage will likely not be as high because wheat prices have retreated. Canola and other oil seeds are gaining acreage statewide as demand for both edible oil and biofuel increases.

Nursery and greenhouse production continues to top the list of agricultural sectors in Oregon, becoming the first commodity to break the \$1 billion mark in farm sales. However, the housing market slump is putting the brakes on this industry's growth.

Oregon's top ag producing counties, 2007

1. Marion	\$ 479,784,000
2. Clackamas	\$ 353,421,000
3. Washington	\$ 330,470,000
4. Umatilla	\$ 292,039,000
5. Yamhill	\$ 254,673,000
6. Linn	\$ 237,549,000
7. Morrow	\$ 177,419,000
8. Klamath	\$ 157,497,000
9. Malheur	\$ 129,634,000
10. Polk	\$ 117,131,000

Oregon's top ten commodities, 2007

1. Greenhouse and nursery products	\$ 988,000,000
2. Grass seed, all	\$ 507,732,000
3. Hay, all	\$ 470,040,000
4. Cattle and calves	\$ 465,249,000
5. Milk	\$ 408,639,000
6. Wheat, all	\$ 384,691,000
7. Potatoes, all	\$ 156,941,000
8. Christmas trees	\$ 109,267,000
9. Pears, all	\$ 89,417,000
10. Hazelnuts	\$ 75,480,000

Erratic weather is proving to be a significant factor in fruit and vegetable production. Cherries, pears, apples, grapes, tomatoes, and many other fresh produce items experienced substantial yield declines due to alternating hot and cold weather patterns throughout the growing season.

A small but growing local food movement gives smaller producers new opportunities to intensively farm and sell directly to urban consumers.

Exports remain critical to Oregon agriculture even as locally sourced food gains increased favor in many Oregon communities. Eighty percent of what Oregon produces leaves the state. Forty percent leaves the country, primarily to Asian and European markets. This compares to a national export level of 25 percent for US farm and food goods. As a result, transportation infrastructure and cost are significantly

important to Oregon producers.

Dealing with changing consumer demands, food safety issues, certification programs, labor uncertainties, and international trade fluctuations is now part of the daily effort to produce food, fiber, fuels, and other goods.

Being a part of sustainable agriculture in Oregon means adapting to ever changing market and consumer preferences. Change is always a challenge, but Oregon growers diversify production, utilize the latest technologies, employ aggressive stewardship of their natural resources, and pay close attention to trends. All this helps, but doesn't immunize growers from the external forces of the wider economy.

Oregon growers demonstrate ingenuity and innovation, dedication to the communities they live in, stewardship of natural resources, and

Oregon ranks #1 in the nation in the production of:

- Bentgrass seed
- Ryegrass seed
- Fescue seed
- Orchardgrass seed
- Blackberries
- Boysenberries
- Loganberries
- Black raspberries
- Hazelnuts
- Onions, storage
- Christmas trees sold
- Potted florist azaleas

Oregon ranks second or third in the nation in the production of:

- Peppermint
- Hops
- Spearmint
- Red raspberries
- Prunes and plums
- Snap beans for processing
- Kentucky bluegrass seed
- Strawberries
- Blueberries
- Sweet cherries
- Pears
- Green peas for processing
- Mink pelts

a commitment to produce quality products.

We commend Oregon farmers and ranchers for their contributions to our state.

SUSTAINABILITY IN AGRICULTURE



“There are very few, if any, Oregon industries that can demonstrate sustainability better than agriculture. After all, how could we have farms and ranches more than a century old if they couldn’t sustain themselves? Economic sustainability means adapting and innovating in ways that allow a producer to make money. Environmental sustainability means properly managing our natural resources in a way that allows future generations of farmers and ranchers the opportunity to produce food and fiber. Now that the customer is demanding responsible and sustainable agricultural practices, it’s important to give producers help and access to programs and services that certify the sustainable practices taking place within the industry.”

*Katy Coba
Director, Oregon Department of Agriculture*

SUSTAINABILITY IN AGRICULTURE

Agricultural perspective

Agriculture has sustained Oregon's economy, environment, and way of life since before statehood, nearly 150 years. More than 1,000 farms in Oregon have been family owned for more than a century, and 19 families have achieved 150 years of continued business.

Growers in Oregon adapt to change, adopt some of the most progressive management practices and technologies in the world, and continue to care for Oregon's critical agricultural resources.

The highly used term "sustainable" has become popular in recent years. It's a word that means many things to many people. Most would agree it includes aspects of economic viability, environmental stewardship, and social or community connections. Many retail outlets now require certification or third-party audit of sustainability criteria.

To meet marketplace expectations, industry has demanded that specific certification programs be developed. These programs certify soil conservation practices, integrated pest management, biodiversity, environmental management and social health and safety.

Many growers work diligently to sustain Oregon's natural resources. Statewide practices and programs include:

- container nursery irrigation water recapture programs.
- restoration of streambank systems and riparian areas, including fencing to keep livestock out of streams.
- low-till or no-till practices to enhance soil quality and reduce erosion.
- integrated pest management (IPM) practices to minimize chemical use.

The Oregon Department of Agriculture is a key partner in the industry's adoption of many of these nationally recognized sustainability benchmarks.

The challenge

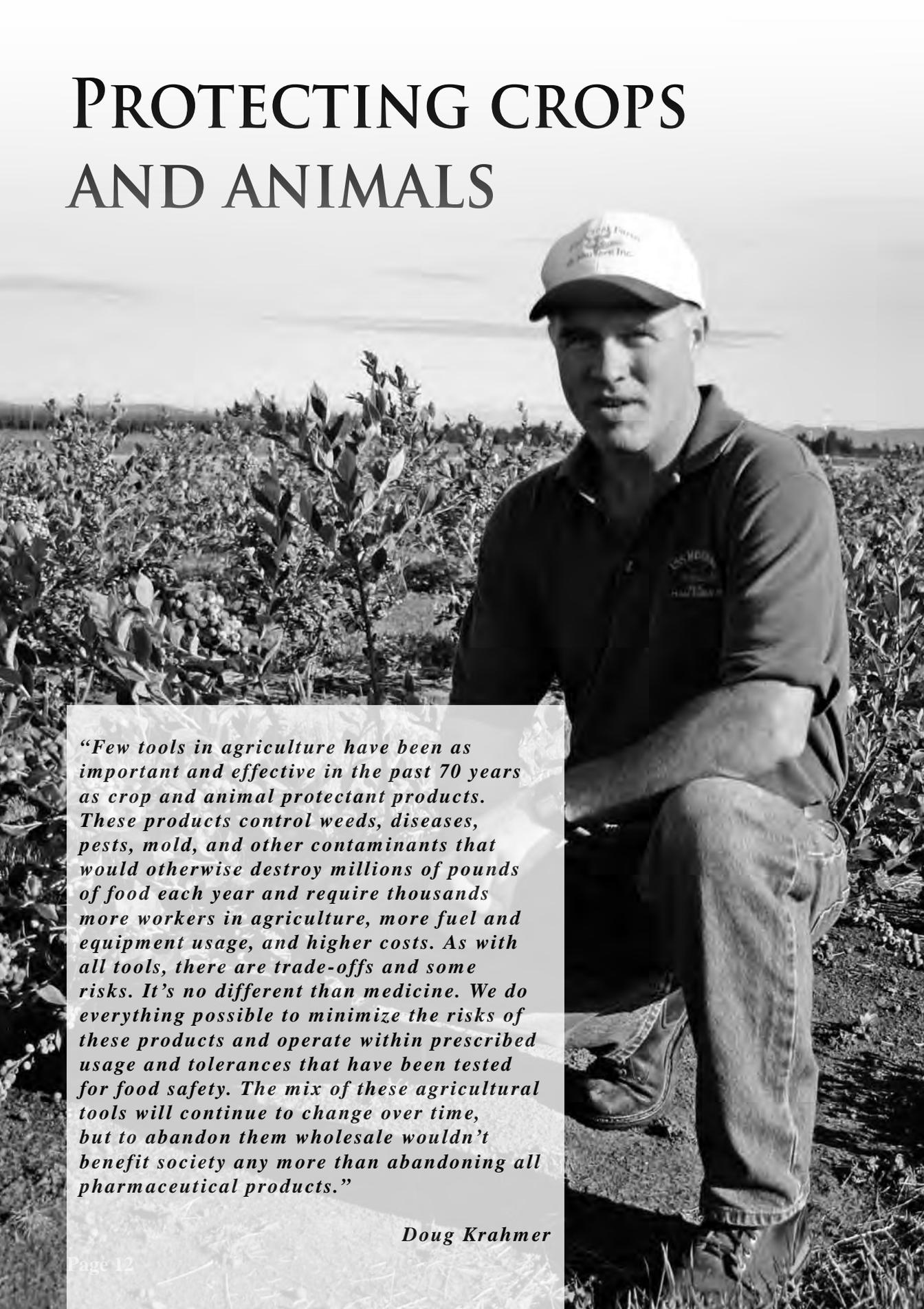
The agriculture industry can improve public education and communication efforts regarding improved sustainability practices by Oregon farmers and ranchers. Many growers want to respond to rapidly changing marketplace priorities with specific certification programs. Many smaller growers and processors struggle to pay for certifications their customers demand, limiting market access.

Growers must determine which certification program or audit best fits their operation and their particular marketing avenue. These processes add cost to growers and others along the food chain. Growers need to know if the added cost of certification programs provides any reward, or if it is simply the price of meeting consumer preference in the new marketplace.

Policy recommendations

- Fund the Oregon Sustainable Agriculture Resource Center (OSARC).
- Understand there are many definitions of "sustainable agriculture" and a variety of sustainable certification providers.
- Support domestic and international market programs to maintain markets critical to sustaining Oregon's economy.
- Support ongoing research to develop appropriate tools, both chemical and non-chemical, to effectively treat pest and disease issues without harm to the environment.
- Continue appropriate funding of Soil and Water Conservation Districts (SWCDs) and Watershed Councils so they can continue to implement the Oregon Plan for Salmon and Watersheds.

PROTECTING CROPS AND ANIMALS



“Few tools in agriculture have been as important and effective in the past 70 years as crop and animal protectant products. These products control weeds, diseases, pests, mold, and other contaminants that would otherwise destroy millions of pounds of food each year and require thousands more workers in agriculture, more fuel and equipment usage, and higher costs. As with all tools, there are trade-offs and some risks. It’s no different than medicine. We do everything possible to minimize the risks of these products and operate within prescribed usage and tolerances that have been tested for food safety. The mix of these agricultural tools will continue to change over time, but to abandon them wholesale wouldn’t benefit society any more than abandoning all pharmaceutical products.”

Doug Kraemer

Agricultural perspective

Sustaining yields and minimizing pest and disease impacts on crops is key to success for farmers and, ultimately, consumers. Since 1950, commercial pesticide products used to control plant pests and diseases, kill weeds, and protect animal health have enabled bountiful production of food, fiber, and other consumer products at historically low prices.

These crop and animal protectant products—like medicine—are tools. When applied appropriately and at prescribed rates, they have predictable and beneficial results. Over time, new information has uncovered long-term unintended effects, and a handful of chemicals have been banned due to negative impacts on wildlife, water, or human health.

Use of plant and animal protectant products in agriculture enables the world to enjoy plentiful and healthy food at reasonable costs on less land than would otherwise be possible. One recent report estimates that 500,000 additional field workers would be required to pull weeds and other unwanted vegetation currently controlled by herbicides in the US. Alternatively, eliminating herbicide control would require more mechanical cultivation with associated fuel costs, air quality impacts, and soil compaction. This is only an example of weed control

efforts. It does not include the beneficial impact of protectant products for insect, disease, and pest control. The loss of these products could result in economic damage and the loss of millions of tons of food.

A significant portion of Oregon's agriculture industry has adopted integrated pest management (IPM) as a way to deal with pest issues. IPM does not preclude the use of pesticide products, but incorporates a variety of non-pesticide practices and methods to control or eliminate pests. Examples include biological control agents—good bugs—to control invasive weeds, and the use of a non-synthetic mildew protectant product for Oregon wine grapes.

Growers are financially motivated to use no more pesticide products than necessary. They undergo extensive training before they can apply many types of pesticides and must follow the rate and timing requirements on the label.

The challenge

Some believe that the unknown health and natural resource problems associated with the use of pesticide products create risks that outweigh the benefits. They advocate increased regulation, and favor banning the use of all commercial chemicals outright or in certain locations such as schools, parks, and other public sites.

Organic production and certification is increasing in Oregon and nationwide. But organic production is not yet practical for some types of agriculture. Yields are generally lower. Production costs are higher, and include an increased need for labor and other inputs. The result in the short term is higher prices for organic food at the store. In addition, organic fertilizers (animal manure) and crop protectant materials approved for organic use are not yet widely available, cost competitive, or easily transportable to the millions of acres in agricultural production.

Policy recommendations

- Support policies and systems that balance the ability of agricultural producers to deal with pests and diseases with the need to protect natural resources. Sustainable methods to control crop and livestock pests and diseases are those that are effective, minimize negative impacts on the environment, and are affordable.
- Support ongoing research for appropriate tools, both chemical and non-chemical, to treat pest and disease problems or to use as fertilizers.

AGRICULTURAL LABOR



“Labor is one of the greatest issues facing Oregon agriculture. Our farms are more efficient and use greater automation. But the diversity of products, combined with jobs that require experienced and skilled workers, make it hard to compete globally. An unskilled labor force will put Oregon agriculture at a disadvantage. We need to retain our existing workforce and recruit new workers with the knowledge and skills necessary for the highly technological field that defines modern agricultural practices.”

A critical challenge to agriculture is the potential loss of vitally important immigrant farm workers. If we lose our migrant workforce, the economic impact to Oregon will be in the billions of dollars. Another challenge is the failure of Oregon’s education system to adequately prepare people for the many professional opportunities that exist in agriculture. The State of Oregon must invest more in educational programs at Oregon State University and in our community colleges.”

Tom Fessler

Agricultural perspective

The food industry—from farm to fork—employs more than 214,000 people in Oregon.

Careers in agriculture are extraordinarily diverse. They include on-the-farm producers and managers, irrigation engineers, food scientists, plant breeders, marketing and wholesale specialists, renewable energy technicians, and natural resource management specialists.

More than 10 percent of total employment in Oregon is connected to agriculture, and nearly 11 percent of State Economic Activity (SEA) is sustained by agricultural production.

There are about 37,000 Oregon family farmers who employ 30,000 workers during non-harvest periods. Those workers increase to nearly 100,000 in peak season, for an average annual workforce of about 58,000.

Agriculture competes in a worldwide marketplace. Wages paid in Oregon are indexed annually under present Oregon law. Oregon, along with neighboring states of Washington and California, typically has the highest agricultural wage rates in the US (excluding Hawaii), averaging nearly \$11.00 per hour. Wages in Mexico are less than \$4.00 per day. Even at present wage rates, it is difficult to attract domestic workers to on-farm jobs. However, workers from Mexico find these wages attractive and have been willing

Table 8.—Oregon agriculture's economic footprint (2005).

Aggregated sector	Output (\$000) Sales	Employment Full- & part-time jobs	Value added (\$000)
Production, processing, & agricultural support services	18,846,703	142,898	8,031,841
Wholesale trade	2,933,782	22,247	1,894,516
Transportation & warehousing	916,250	8,753	516,352
Retail trade	3,073,815	40,613	1,892,439
Total agriculture	25,770,550	214,511	12,335,149
Total all Oregon sectors	242,673,884	2,116,589	129,937,290
Portion agriculture (%)	10.62	10.13	9.49

Source: Oregon State University

to enter the US under illegal conditions to work in agriculture.

The challenge

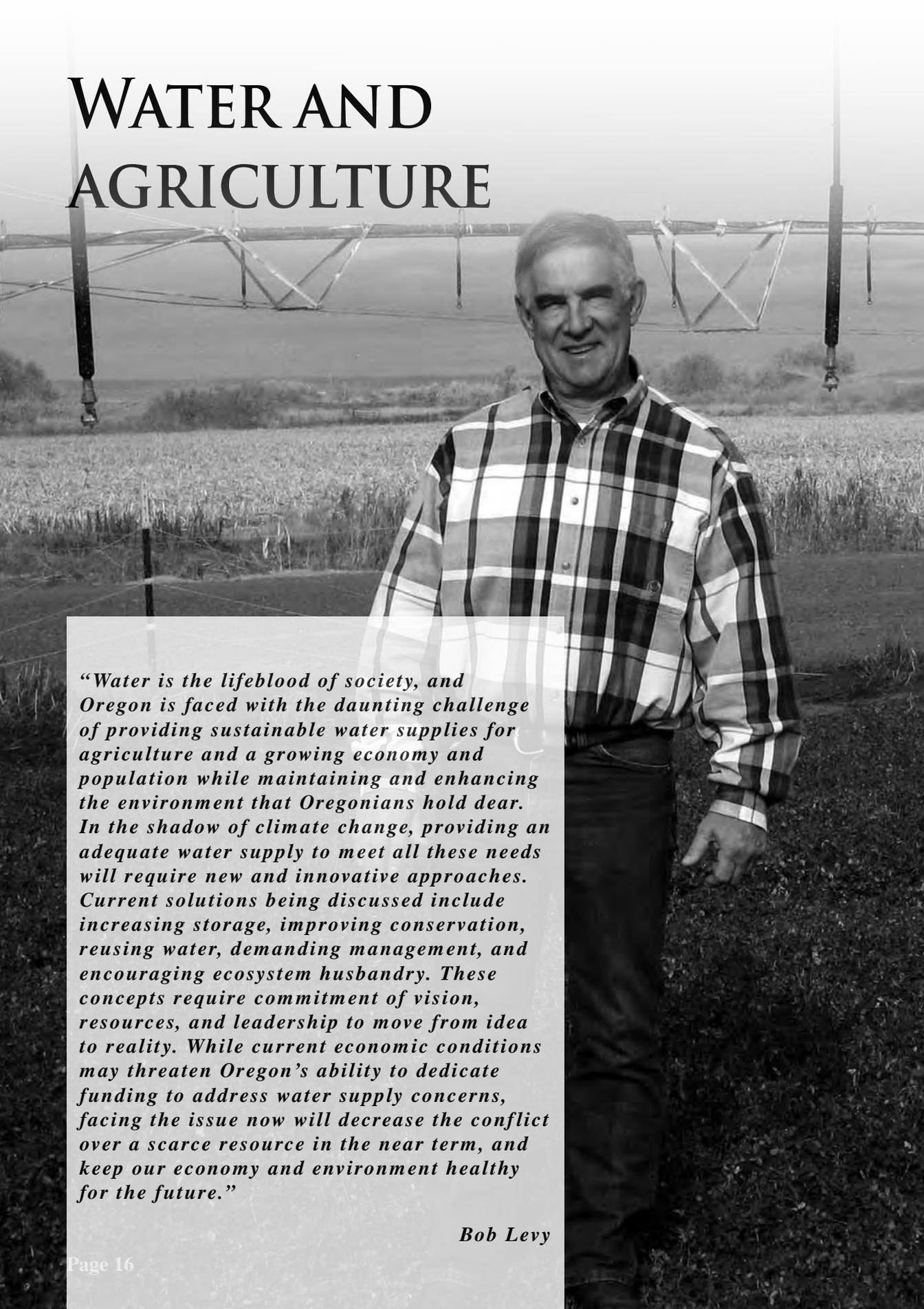
Oregon agriculture is looking to the US government to enact appropriate immigration and documentation procedures to enable an adequate and legal workforce for agricultural needs. Temporary guest worker programs are costly, overly bureaucratic, and unworkable under present laws. The industry

faces an uncertain future, with an estimated 50 to 70 percent of Oregon's agricultural workforce undocumented. This is not unique to Oregon or to agriculture. Yet the industry cannot do without, or easily replace, these workers. Today's farm worker is skilled in machinery operation, pruning, irrigation management, and many other tasks that limit the ability to rapidly place untrained workers in the workforce.

Policy recommendations

- Urge Congress and the President to quickly pass immigration reform legislation so that employers and employees know the rules and processes for legal employment in agriculture.
- Enact state-level farm worker bargaining laws that provide appropriate safeguards to all parties, ensure workers have the ability to organize under secret ballot procedures, and remove the threat of boycotts that damage Oregon businesses.
- Support state educational programs that provide improved training and retention of farm workers and others in our natural resource industries.
- Provide more resources for programs like Agriculture in the Classroom, the Summer Ag Institute, and other outreach efforts to educate Oregon's students and future leaders about careers and issues in natural resources and life sciences. These efforts continue the sustainability of Oregon's workforce and economy.
- Repeal legislation requiring proof of citizenship for an Oregon's driver's license.

WATER AND AGRICULTURE

A black and white photograph of a man with short, light-colored hair, wearing a plaid button-down shirt and dark pants. He is standing in a field, looking towards the camera with a slight smile. In the background, there is a large irrigation system with long metal pipes supported by towers, stretching across the landscape. The field appears to be a crop field, possibly corn or soybeans, with some taller grasses in the foreground.

“Water is the lifeblood of society, and Oregon is faced with the daunting challenge of providing sustainable water supplies for agriculture and a growing economy and population while maintaining and enhancing the environment that Oregonians hold dear. In the shadow of climate change, providing an adequate water supply to meet all these needs will require new and innovative approaches. Current solutions being discussed include increasing storage, improving conservation, reusing water, demanding management, and encouraging ecosystem husbandry. These concepts require commitment of vision, resources, and leadership to move from idea to reality. While current economic conditions may threaten Oregon’s ability to dedicate funding to address water supply concerns, facing the issue now will decrease the conflict over a scarce resource in the near term, and keep our economy and environment healthy for the future.”

Bob Levy

Agricultural perspective

Water is key to sustaining agriculture and providing the products the world consumes. About 70 percent of water use in Oregon and worldwide is for production of crops and livestock.

Oregon's geography and location lead to wet winters on the west side and dry summers statewide. Mountain snow pack is needed for irrigation in the summer. Additional water is stored in reservoirs and lakes, and in groundwater recharge. About 78 percent of Oregon agriculture's irrigation water comes from surface water rights in rivers and streams fed by snow pack runoff. Still, about 93 percent of the rainfall and melted snow pack in Oregon and the Pacific Northwest proceeds as runoff to the Pacific Ocean, down waterways like the Snake and Columbia river systems.

Virtually all fruits and vegetables grown in Oregon

Nearly two million acres of Oregon agriculture are irrigated.

Nearly 45 percent of Oregon farms irrigate some or all of their land.

Oregon ranks third of all states in the number of farms that use irrigation, and ninth of all states in the number of acres irrigated.

Irrigated farms produce 77 percent of the total value of harvested Oregon crops.

and the US are produced with irrigation. Yields of other crops, including grains, can increase up to 500 percent with irrigation. Water enables more production on less land—increasing food for a growing world population.

Infrastructure to store water (above or below ground, off channel or farm ponds), delivery systems to farms, and highly efficient irrigation methods are important investments for Oregon's future.

The challenge

Irrigation needs often conflict with fish recovery efforts or other habitat issues. Oregon water resources are considered

to be “over allocated.” Almost all developed resources are obligated to “in-stream” use for fish and recreation, downstream urban and industrial consumption, or farm irrigation.

Oregon needs more water to create new economic opportunities, meet the demands of a growing population, and provide for natural resources. Investment in studies and projects to identify storage locations (above or below ground), new technologies, and new water resources will create more opportunities and additional water allocations for a wide range of purposes.

Policy recommendations

- Follow up the 2007 investment in studies and grants, and continue the water basin planning process to establish baseline water availability, peak flows, and demands.
- Immediately fund statewide 50-year water assessment needs for anticipated demands related to all uses, fully accounting for an increase in demand for agriculture and increased acreage opportunities. There are thousands of acres in Oregon that could be in productive agriculture if water were available.
- Fund efforts to identify and evaluate storage strategies, delivery options, new usage technologies, conservation efforts, and implementation timelines.
- Create strategic outcomes for new water resources.
- Support the fundamental right established in common law to access and use water for agricultural applications. Farm property values are inextricably linked to irrigation. Irrigation and the production of high value crops create higher farmland values, a robust local property tax base, and a more vigorous farm economy.
- Continue supporting proactive, voluntary measures that enable farms and ranches to maintain and enhance water quality. This also supports the Oregon Plan for Salmon and Watersheds.

LAND USE



“Agriculture is a vital part of what makes Oregon the state it is. A good land use system supports and encourages all that agriculture stands for. Without a good land use system, the long-term viability of agriculture could be at risk. Conflicting uses increase costs and liabilities for the producer that, over time, may render agriculture unprofitable or undesirable. Economically, agriculture is Oregon’s second largest industry. Ecologically, agriculture provides much of the green open space and wildlife habitat that is so valuable to our natural resources. The farmers, ranchers, nursery operators, and the rural communities they support could be called the social backbone of Oregon. A good land use system helps agriculture protect the land, produce a healthier environment, and build successful communities.”

Ken Bailey

Agricultural perspective

Land in agricultural use can be viewed as a biological production facility. Sunlight, land, water, nutrients, and skilled management provide everything necessary to transform seeds and plants into crops and products usable by humans. Even livestock, which provide such products as eggs, milk, and meats, make use of the land and what it has to offer. Properly managed, agricultural lands can sustain production far into the future. Farms and ranches provide food for humans and amenities enjoyed by society—trees, plants and other products.

Roughly 17.1 million acres—28 percent of Oregon’s land mass—are engaged in agricultural production. About 3.5 million acres are classified as cultivated acreage planted and harvested yearly. Another half million acres are in fallow rotation with wheat production. An equal number are enrolled in dedicated conservation uses (10-year contracts or trusts, easements, riparian buffers, etc.). Nine million acres are in pastureland and rangelands used for livestock. The remaining acreage is in woodlands, farm buildings, farm ponds, and miscellaneous uses.

New technology enables higher yields and better production practices. But land availability in large enough sectors, without conflicts from non-agricultural activities,

is essential to a viable and sustainable agricultural sector.

The challenge

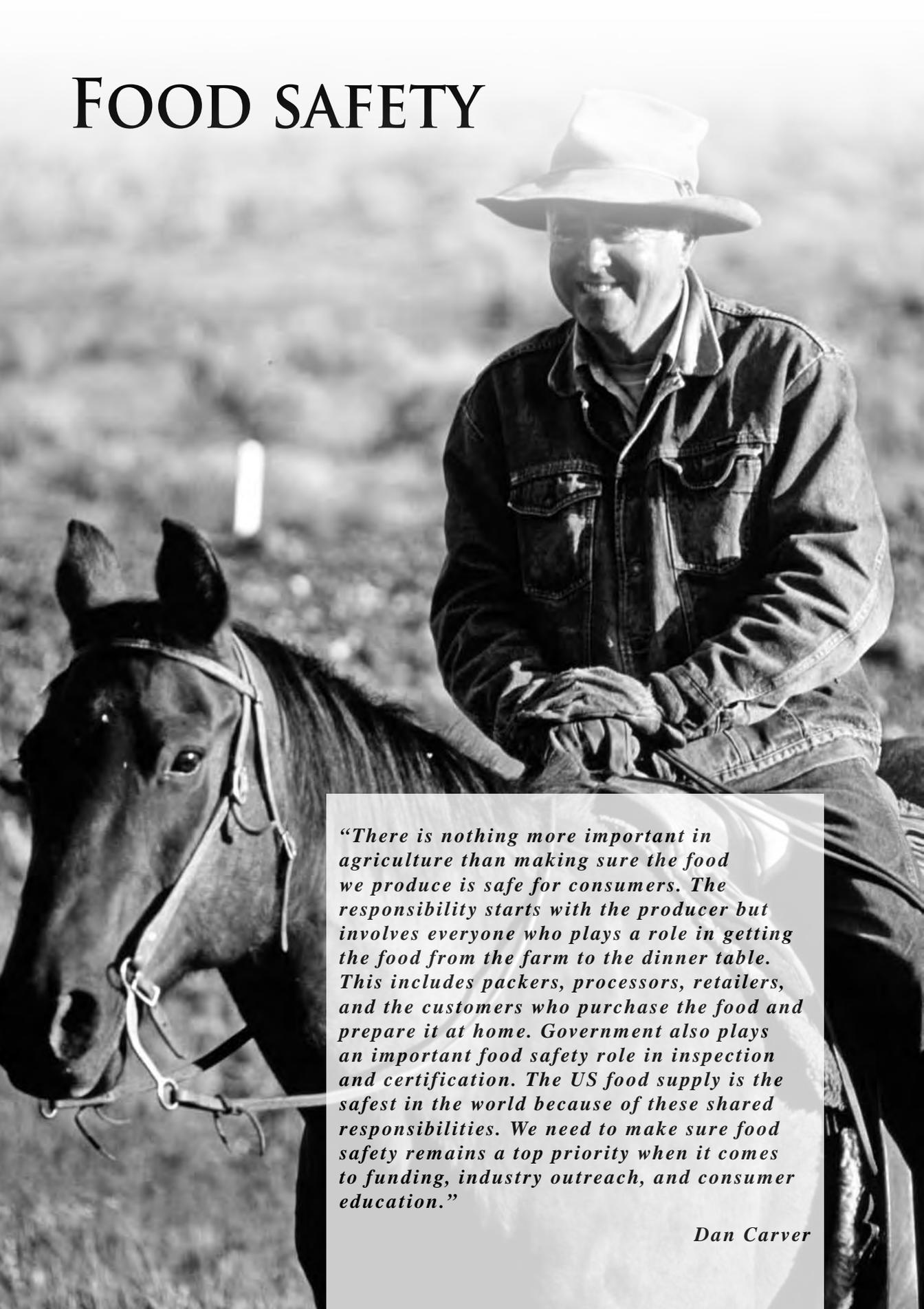
The most highly productive agricultural land in Oregon is also where most Oregonians choose to live—the Willamette Valley. Exclusive Farm Use zones (EFU) have been used since the 1970s to keep lands in agricultural use and minimize conflicts with surrounding communities.

While EFU zones and Oregon’s Right to Farm laws provide some insulation from these pressures, there are still thousands of acres of farmland converted to non-farm uses each year. The cumulative impact affects industry viability, as acreage is lost to development. Growers lose input suppliers, travel further for parts and repairs, and lose processing facilities because of lower crop acreages. There are more nuisance complaints by non-farmers and more non-compatible uses.

Policy recommendations

- Maintain strong support for Oregon’s land use system as stated in ORS 215.243(2): “The preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state’s economic resources and the preservation of such land in large blocks is necessary in maintaining the agricultural economy of the state and for the assurance of adequate, healthful and nutritious food for the people of this state and nation.”
- Discourage the expansion of urban growth boundaries (UGBs) onto prime farmland. In the event UGBs expand onto such lands, add protections to the area’s remaining prime and unique farmland base. This includes buffer zones built into the UGB that create distance between the boundary and active farming.
- Support strong “right-to-farm” laws that shield producers from nuisance lawsuits aimed at curtailing traditional and accepted agricultural practices. As reflected in the policy statement in ORS 215.243(3), “Expansion of urban development into rural areas is a matter of public concern because of the unnecessary increases in costs of community services, conflicts between farm and urban activities, and the loss of open space and natural beauty around urban centers occurring as the result of such expansion.”
- Resist attempts to broaden non-agricultural uses permitted in Exclusive Farm Use zones, and reduce the list of permitted non-agricultural uses in EFU zones.

FOOD SAFETY



“There is nothing more important in agriculture than making sure the food we produce is safe for consumers. The responsibility starts with the producer but involves everyone who plays a role in getting the food from the farm to the dinner table. This includes packers, processors, retailers, and the customers who purchase the food and prepare it at home. Government also plays an important food safety role in inspection and certification. The US food supply is the safest in the world because of these shared responsibilities. We need to make sure food safety remains a top priority when it comes to funding, industry outreach, and consumer education.”

Dan Carver

Agricultural perspective

Agricultural practices vary with each farm. However, agriculture is highly regulated in its activities with respect to resource sustainability and off-site impacts. This is particularly true with water quality, crop protectant materials, employee conditions and pay, interstate movement of agricultural goods, on-farm processing and handling of food, and feed ingredients.

Even with protections and procedures in place, foods are susceptible to microbial contamination, human error, technological limitations, and consumer handling.

Much of the nation's food system oversight is divided among federal agencies. The US Department of Agriculture (USDA), the Food and Drug Administration (FDA), and the Homeland Security Agency are responsible for sampling and monitoring imported foods, both produce and livestock. One-third of the US supply of fruits and vegetables is imported, some for climatic reasons (bananas don't grow well in the US), and others because of price comparative advantages. USDA inspects most meat processing facilities in the US and responds to animal diseases that can move across international borders.

FDA, along with state public health departments, oversees food-related disease and illness. These agencies track epidemiological factors that

assist with traceback of food-related health incidents.

State departments of agriculture, including the Oregon Department of Agriculture, are generally responsible for on-site inspections of dairies and feedlots, food processing facilities, warehouse and distribution centers, delis and other food establishments. (Restaurants in Oregon are overseen by county health departments).

The challenge

From farm to fork, food safety is important. This includes the proper preparation and handling of foods by consumers.

New and complex food safety issues, including concerns over some imported products, require an investment in up-to-date laboratory testing and analyzing capabilities. The marketplace demands food source identity, traceability, and faster response time from food safety officials at the state and federal levels.

An appropriate level of funding is critically needed to inspect the increasing amount of food moving across borders. The Country of Origin Labeling (COOL) system should help. Good public policy and food safety requires sound scientific practices and the ability to track food products when the risk is real,

Without adequate funding and a strong traceability program, food emergencies can be overstated in the media or by interest groups that target certain food production practices or products.

Policy recommendations

- Support state budget levels necessary to meet food safety needs for Oregon consumers. Food safety is important to all consumers and should receive General Fund support. The farm/food industry shares responsibility to ensure integrity of the food supply, but a system of food safety programs, predominantly funded by the industry, is not good public policy. Appropriate levels of funding are critical for ODA state programs that provide inspection and testing of food.
- Pass a resolution encouraging Congress to fund federal food safety programs and increased border inspection of produce and livestock entering the US.

PRODUCTION COSTS

A black and white photograph of a woman standing in a field of crops, likely a field of small flowers or vegetables. She is wearing a striped short-sleeved shirt and dark pants. The background shows a valley with a fence line and mountains in the distance under a clear sky.

“Agriculture is in transition. The immediate challenge for Oregon agriculture is to find additional ways to deal with out-of-control input costs. Agriculture buys inputs at retail costs and sells its products at wholesale prices. In general, we are price takers rather than price setters. We are dependent upon supply and demand economics operating in a global marketplace. Creating new markets and export opportunities, new value-added products, and developing additional niche markets is key to having a sustainable agriculture. It will require new technologies, new thinking, new ways of operating, and adaptation. We have to position ourselves for the future.”

Jan Kerns

Agricultural perspective

The cost of fuel, fertilizer, animal feed, equipment, tires, twine, labor, credit, storage, and many other inputs that growers rely on to raise their crops and livestock has increased dramatically in the past three years.

While growers received high market prices for farm goods, these increases were essential to cover the rising costs to producers. Fertilizer prices in 2007-08 were at all-time highs. World fertilizer demand from 2001 to 2006 grew 14 percent, which represents the size of a whole new US fertilizer market. Demand for fertilizer rose in China, India, and Brazil. Since 2000, the US has lost about half of its nitrogen production capacity. This is largely due to high and volatile prices for natural gas, the main component in fertilizer production. Now, instead of nitrogen coming from US sources, US retailers and suppliers buy most of it from foreign sources at higher prices due to a lower valued US dollar.

Increased prices for hay, grains, and other feeds, while good for those growers, have crimped profitability for livestock producers, including beef, dairy, poultry, and equine operators. One of the peculiarities of agriculture is evident—prices that help one sector may hurt another as many farm inputs move between different segments of the industry.



Source USDA/ERS. Fuel and fertilizer costs are now more than 50 percent of wheat production costs (non-land expenses) compared to about 22 percent in 2003.

The challenge

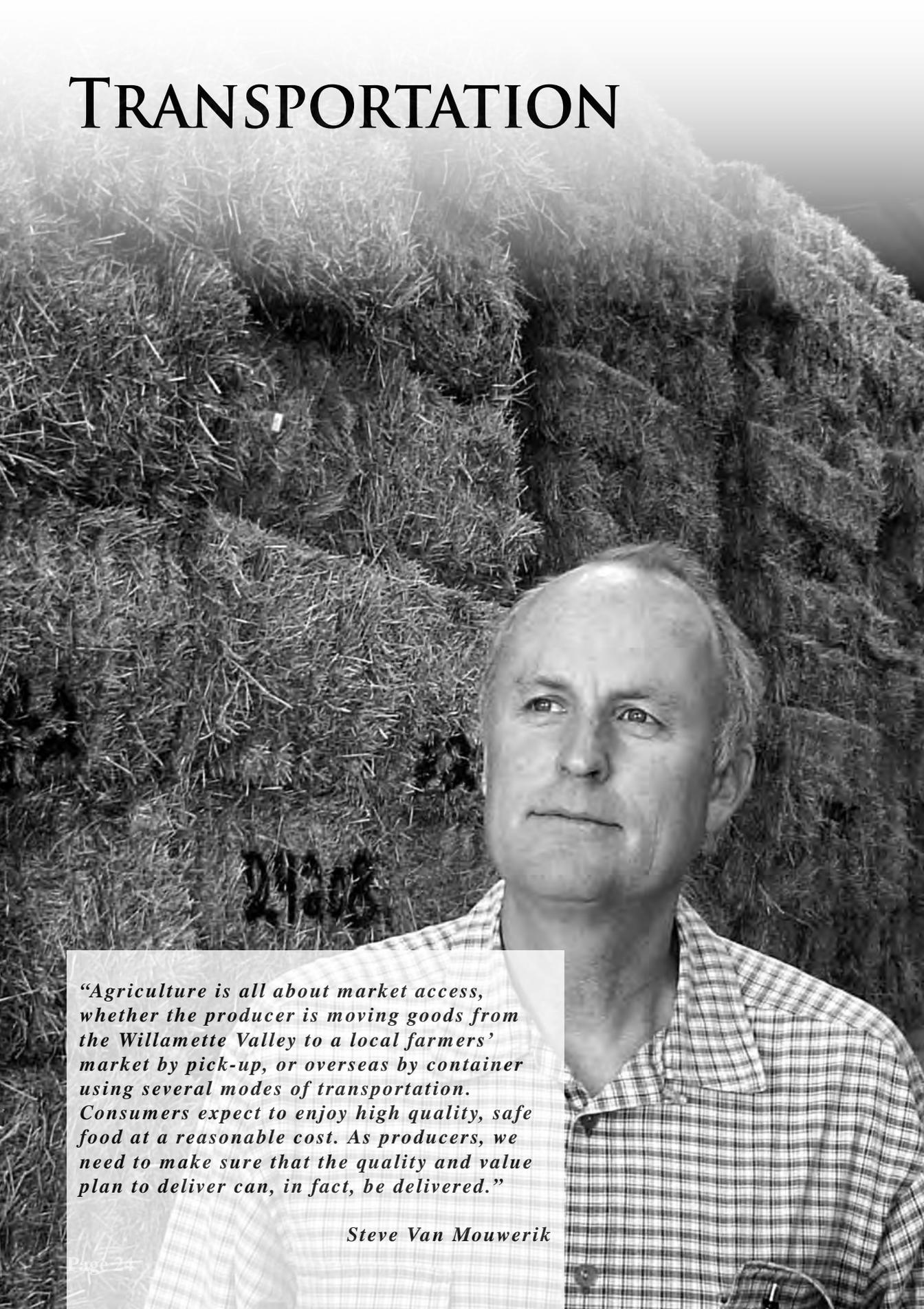
Growers face increased costs for inputs, largely caused by international demand. While fuel and fertilizer costs have backed off their record highs, other costs continue to increase, even as market prices for crops and livestock decrease. Growers face a developing price squeeze that could be crippling.

Challenges often bring opportunities in disguise. Rising costs can force changes in perspective, exploration of new procedures and practices, substitution of different products and services, and new ways of doing business. But change isn't easy and the adjustment will unfortunately result in some winners and some losers.

Policy recommendations

- Recognize that agriculture is an integral part of Oregon's economy and can help pull jobs and income through the current recessionary period.
- Recognize that agriculture is unique in facing weather and pestilence. Society relies on agriculture being successful in sustainably facing these issues.
- Fully fund Oregon State University research aimed at keeping agriculture in Oregon competitive, both domestically and internationally. Research would include higher yielding varieties of crops and livestock, new technologies, new animal diet options, and plant and animal production strategies that reduce inputs.
- Support research to find alternatives to chemical, fossil fuel-based fertilizers for large and small-scale agricultural operations.

TRANSPORTATION



“Agriculture is all about market access, whether the producer is moving goods from the Willamette Valley to a local farmers’ market by pick-up, or overseas by container using several modes of transportation. Consumers expect to enjoy high quality, safe food at a reasonable cost. As producers, we need to make sure that the quality and value plan to deliver can, in fact, be delivered.”

Steve Van Mouwerik

Agricultural perspective

Moving fresh product to market in a timely manner is critical for producers and consumers.

Processed goods require the same transportation and infrastructure requirements as do non-food goods. The key components of an effective system to move agricultural goods from point of origin include

- an adequate and well-trained labor force for production and harvest.
- adequate equipment and technology to harvest, process, and move product from field to warehouse or processing facility in a timely manner.
- roadways, bridges, and related infrastructure that enable movement of farm vehicles from field to field and from field to delivery points.
- economical methods of transport to move aggregated crops, livestock, and farm goods (fresh or processed) via roadway, railway, waterway, and airway to destination points around the world.

The challenge

Fuel and energy costs affect all facets of the food and fiber system. From planting and fertilizing to harvesting and transporting—every step is impacted. Gaining relief from these costs through increased supply and transportation alternatives is imperative.

Roadways are crowded in much of the state and moving farm machinery is increasingly difficult, especially in the Willamette Valley.

The cost of using containers for offshore shipments, a bargain over the past decade, has climbed. Rail cars are in short supply. Air shipments of high value products are increasingly unmanageable, due to fuel costs and foreign regulatory import requirements.

Topping out at about \$9,000 in 2008, the typical cost of transporting a cargo container to China from the US is three times what it was in 2003. The ocean freight cost adds the equivalent of a 10 percent duty to the price of goods exported to China and other Asian nations and nearly as much on cargo to Latin America, Eastern Europe and the Mideast. Fortunately, these costs are now declining.

Over the past two years, several US railroads have renegotiated contracts with ocean carriers and, in many cases, the rail rate has increased by as much as 40 percent.

The trucking industry is shrinking. In the past two years about 3,500 firms nationwide have shut down while others have curtailed operations. Many have sold some of their big rigs to buyers overseas. As the economy starts to recover, capacity will be further strained due to fewer trucks and trained drivers.

Commercial waterways are vital components of our transportation system. Shipping by barge is a far more economical method of shipping than by rail or truck. The typical barge can move 750,000 bushels of wheat; that same amount would require 870 trucks.

Policy recommendations

- Provide more attention and support for efforts focused around barge shipments of product from Oregon to other west coast ports.
- Provide state involvement and influence on railways to keep short rail lines open, conduct oversight on rate charges, and ensure the availability of cars for agricultural and other product movement in Oregon.
- Support completion of the “last mile” of Columbia River channel deepening.
- Support an updated I-5 bridge connecting Oregon and Washington.
- Invest in community college or other vocational training of truck drivers and other transportation specialists.

LOCAL FOODS



“Consumers today want to know where their food comes from and increasingly want to know how it is grown. Many are also committed to supporting the local economy and want access to the freshest food products available, helping to explain the growing interest in farmers’ markets, community supported agriculture, farm stands and other farm-direct marketing options. Farm-to-school programs that focus on locally grown foods add to this momentum. While most of Oregon agriculture remains largely dependent on markets outside the state, there is a small but growing number of viable farms in Oregon that serve the urban market, providing a vital link between urban and rural Oregon.”

Lynn Youngbar

Agricultural perspective

Today's consumers increasingly demand healthy, fresh, locally grown food. Farmers' markets, farm stands, CSAs (community supported agriculture)—consumers pre-pay for the season and receive a weekly box of fresh food from the farmer), and direct restaurant and institutional sales provide options for consumers. They also provide a viable income and a renewed sense of purpose to a growing number of small farms.

Buying local food products helps preserve farmland, promotes food security, and has a positive local economic impact, while potentially reducing emissions of greenhouse gases and reliance on fossil fuels. More than 90,000 urban food shoppers weekly have direct contact with the people who grow their food, helping to bridge the urban-rural gap.

Conventional retailers and food service operators are now interested in identifying products as locally grown. Farm-to-school programs, hospitals, and other institutions provide additional market opportunities for farmers, ranchers, fishermen, and food processors. One third of the state's food service administrators have expressed interest in buying local foods, and more restaurants are distinguishing themselves by purchasing their food locally.

Farmers' markets in Oregon have grown from just 10 in the early 1990s to nearly 90. According to a recent study, the 14 farmers' markets in Portland had \$11.2 million in sales and accounted for 3 percent of all purchases of fresh fruits and vegetables in Multnomah County in 2007. The local economic impact of these purchases amounted to \$17 million by keeping the money within the local economy.

In this same study, two-thirds of the farmers interviewed want to expand their operations in the future. To be competitive in the farm-direct business, farmers need variety, quality, and the ability to extend their growing season. The benefits for growers who develop additional outlets include cash payments, added value, and the opportunity to interact face-to-face with their customers. Growing food products for the farm-direct market can be a new business model for some segments of Oregon agriculture.

The challenge

Farm-direct operations tend to be labor intensive, so availability of farm labor is a major challenge for these growers. Rising costs of other inputs are also a challenge.

Even though the average size of a direct-to-market farm is relatively small, 40_100 acres, it can be difficult to develop the business. Challenges include the high cost of land and length of time from establishing the farm to serving the market.

Farmers' markets are usually located in parking lots and parks. They often lack permanent, secure sites. Many smaller markets struggle financially, yet they are an important resource for new and smaller farms.

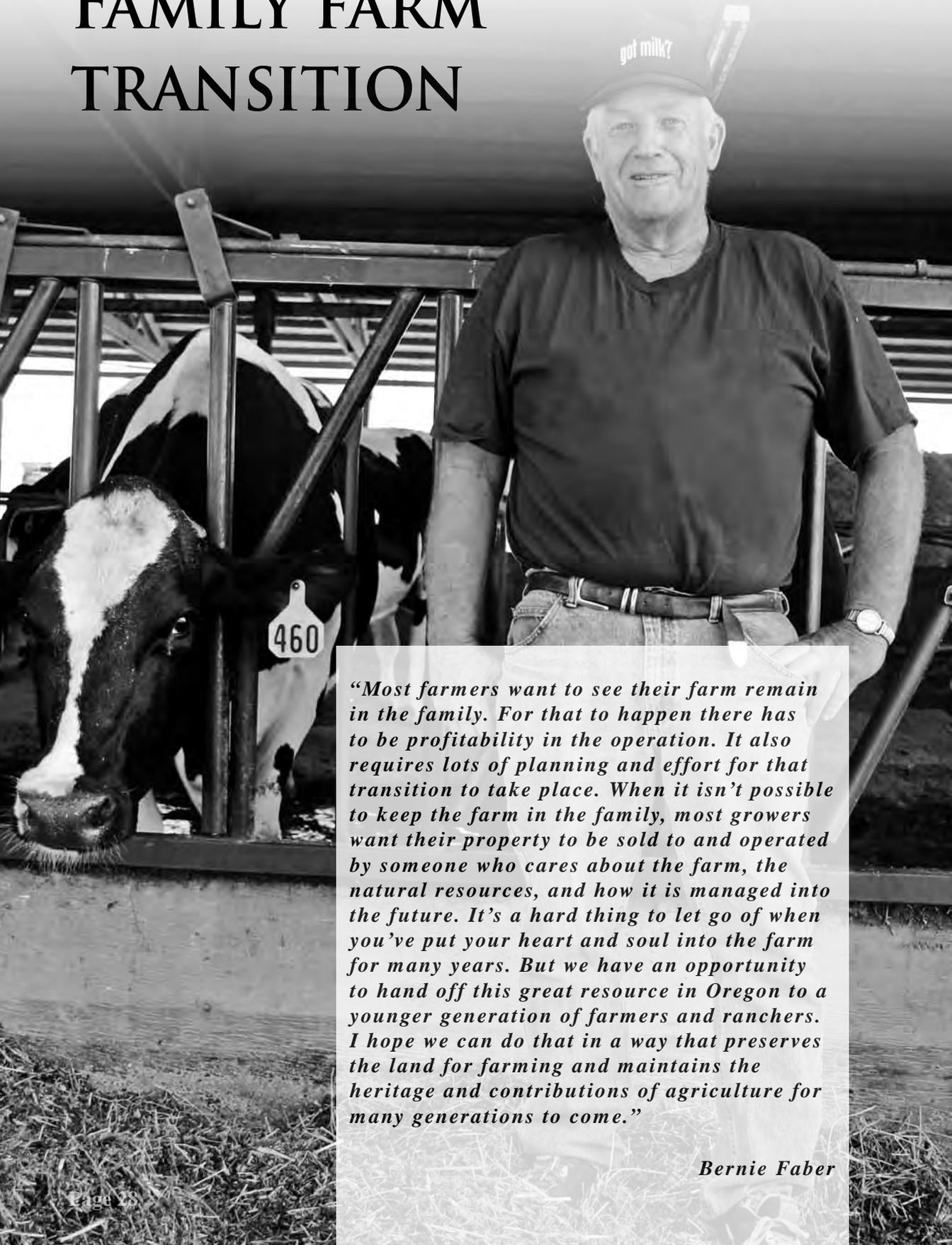
Many farmers in the direct market are relatively new to farming and need training in sustainable practices, production, and marketing.

Farm-to-school efforts have gained momentum, but budget constraints make it difficult for schools to purchase local products.

Policy recommendations

- Support farm-to-school programs: increase budget for meals and distribution systems.
- Support farm-direct market programs that provide training, management tools, financial resources, and address market stability and infrastructure needs.
- Support OSU Extension and the proposed OSARC program. They are important sources of training and technical assistance for farm-direct growers.
- Support certification programs that enable growers to tell their story and gain access to new markets, including farm-direct and other local markets.

FAMILY FARM TRANSITION



“Most farmers want to see their farm remain in the family. For that to happen there has to be profitability in the operation. It also requires lots of planning and effort for that transition to take place. When it isn’t possible to keep the farm in the family, most growers want their property to be sold to and operated by someone who cares about the farm, the natural resources, and how it is managed into the future. It’s a hard thing to let go of when you’ve put your heart and soul into the farm for many years. But we have an opportunity to hand off this great resource in Oregon to a younger generation of farmers and ranchers. I hope we can do that in a way that preserves the land for farming and maintains the heritage and contributions of agriculture for many generations to come.”

Bernie Faber

Agricultural perspective

More than half of Oregon's farmers and ranchers are over the age of 55. These producers collectively own or manage nearly 8.5 million of Oregon's 17.4 million acres. Over the next decade, as the present generation of farmers retires, nearly 50 percent of Oregon's agricultural land will change hands.

Who will own it? Will economic and other incentives that entice people into agriculture as a way of life be adequate to keep these lands in agricultural use? Will young people be attracted to careers in agriculture and the food industry?

Many of the skills needed to successfully operate a farm or ranch require years of hands-on learning and application. Knowledge in biology, genetics, and animal health is important. Experience in crop and feed production, soil management and irrigation technology is often necessary. The ability to deal with commodity marketing, employee management, and regulatory permits is critical. Additionally, agricultural operations produce crops or livestock that may require at least one to five growing seasons to reach maturity and generate revenue. The initial investment in land, seed stock, equipment, and other inputs is substantial. Agriculture is a biological process that cannot be turned on and off like a factory's power switch.

It not only requires farmers and employees working the operation, but additional expertise from lenders, risk management specialists, crop consultants, veterinarians, and many others to keep the food on the table, so to speak.

The challenge

Because of the industry's unique characteristics, it is imperative to attract young producers—whether part of an existing farm or a new operation. The next generation of farmer needs to learn about each specific operation, the production process, markets, and much more. It takes

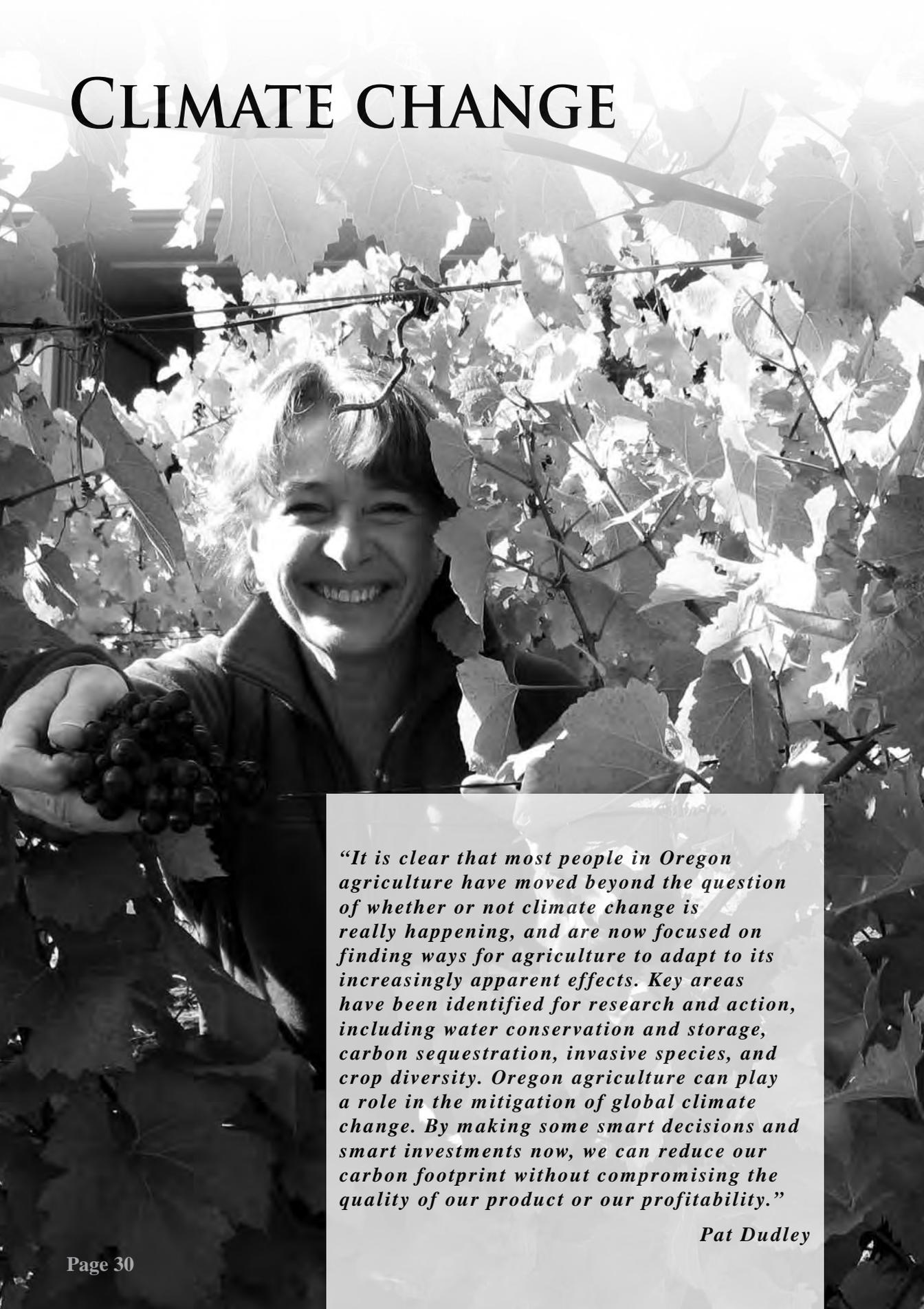
time to transfer the years of experience and institutional knowledge from an aging generation to young producers.

A large amount of farmland will have new ownership in the coming decade. It remains to be seen whether free market forces alone can create an outcome that ensures a viable agricultural industry. Policy makers will need to consider whether they can, or should, provide policy incentives, programs, or structures that encourage farming and other associated industry careers.

Policy recommendations

- Ensure inheritance tax laws and consequences of family property transfers to the next generation don't discourage farming and result in selling off parcels of land to pay taxes.
- Create a business environment conducive to agriculture with respect to regulations and inspections—incentives work better than penalties.
- Support the Oregon Agriculture in the Classroom Program to ensure all Oregon students are exposed to agricultural sciences and related occupational options.
- Support Oregon State University and community college agricultural programs to ensure there are enough graduates and trained professionals to keep Oregon's farms and ranches, food processing, and other agricultural sectors functioning. Of special concern is the critical need for large animal veterinarians.
- Consider supporting a "farm link" program that matches retiring farmers with aspiring young farmers. Coupled with federal lending programs, OSU technical assistance, and other state and federal resources, networks can be created to support a new generation of agriculture professionals.
- Support the Austin Family Business Program at OSU to increase the number of family farm business succession workshops available throughout the state.

CLIMATE CHANGE



“It is clear that most people in Oregon agriculture have moved beyond the question of whether or not climate change is really happening, and are now focused on finding ways for agriculture to adapt to its increasingly apparent effects. Key areas have been identified for research and action, including water conservation and storage, carbon sequestration, invasive species, and crop diversity. Oregon agriculture can play a role in the mitigation of global climate change. By making some smart decisions and smart investments now, we can reduce our carbon footprint without compromising the quality of our product or our profitability.”

Pat Dudley

Agricultural perspective

Our climate is changing. Weather patterns are erratic, with wide swings in temperature across a growing season. Evenings are often warmer, and diseases and insect pests are adapting to new locations. The cause of these changes is being debated within agricultural circles.

It is clear that agriculture faces changes of unknown dimension. The result may mean longer, but drier growing seasons. It may mean more rainfall than snowfall during winter months, requiring more winter run-off to be captured for summer use. It could require planting different crops or using new control methods for insects and diseases.

Agriculture may be able to capitalize on the fact that, by nature, it can remove carbon from the atmosphere. Carbon sequestration, as it is known, results from the simple process of plants extracting carbon for photosynthesis, and “exhaling” oxygen for humans and animals. The carbon is stored in a plant’s roots, the plant itself, and within plant residues. Trees, grasses, and plants sequester carbon from the atmosphere. Minimal soil disturbance through “no-till” farming, or crop rotations that maximize perennial crops and soil covers, can increase carbon retention. These practices may help mitigate carbon (pollution) output from other sectors of industry.

The challenge

Oregon agriculture supports energy efficiency, reduced tillage, methane digesters, and other types of projects eligible for offset benefits in any greenhouse gas cap-and-trade system. Research funds are critical to these projects in order to validate the offset benefits to cap-and-trade program designers. There is a need to audit or conduct on-the-ground inspections, collaborate on projects, and then package them to sell into a carbon market that provides payments back to growers.

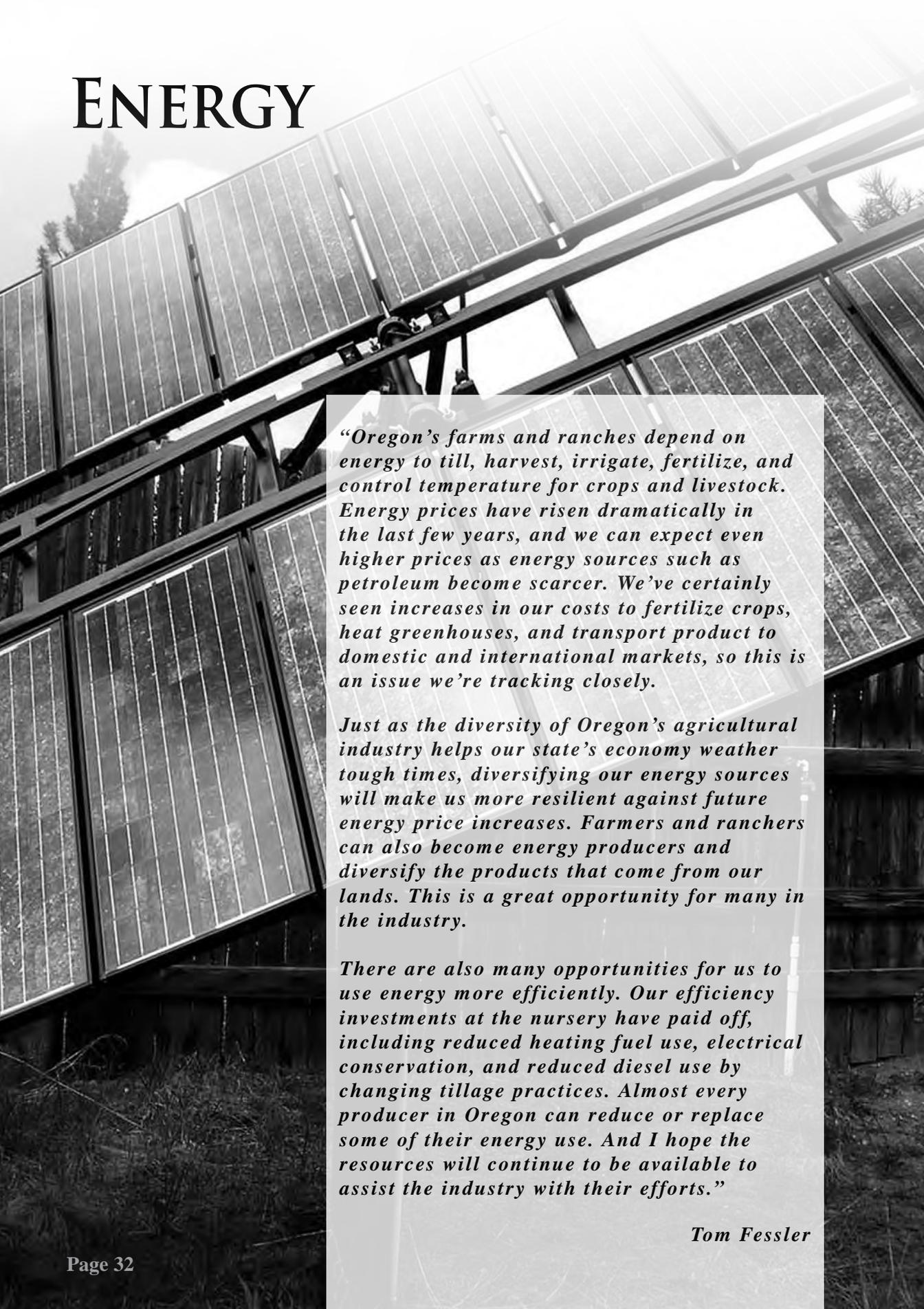
Because farms also use energy, agriculture emits some greenhouse gases (GHGs), primarily from petroleum-based fuels, nitrogen

fertilizers, and methane gas from animal operations. Research is needed to help agriculture adapt to changing practices, as well as energy efficiency and conservation.

Policy recommendations

- Ensure agriculture is at the table in discussions about a cap-and-trade system, including discussions about offset credits.
- Fund research, through Oregon’s higher education institutions, to identify the greatest opportunities for carbon capture in a diversified cropping and livestock system. The next step is to translate those opportunities into widely adopted practices and tradable offset credits.
- Support a position at ODA to help industry understand the impacts and issues around climate change. The person in the position would participate in an offset program and design technical assistance for growers wanting to produce their carbon footprint.
- Support continued technical assistance from SWCDs and OSU Extension to help producers mitigate and adapt to climate change impacts, including water supply problems, pests and diseases, and temperature extremes.
- Fund research to identify and evaluate practices to reduce GHG emissions on agricultural operations.
- Support research and staffing recommendations from the Dairy Air Task Force.

ENERGY



“Oregon’s farms and ranches depend on energy to till, harvest, irrigate, fertilize, and control temperature for crops and livestock. Energy prices have risen dramatically in the last few years, and we can expect even higher prices as energy sources such as petroleum become scarcer. We’ve certainly seen increases in our costs to fertilize crops, heat greenhouses, and transport product to domestic and international markets, so this is an issue we’re tracking closely.”

Just as the diversity of Oregon’s agricultural industry helps our state’s economy weather tough times, diversifying our energy sources will make us more resilient against future energy price increases. Farmers and ranchers can also become energy producers and diversify the products that come from our lands. This is a great opportunity for many in the industry.

There are also many opportunities for us to use energy more efficiently. Our efficiency investments at the nursery have paid off, including reduced heating fuel use, electrical conservation, and reduced diesel use by changing tillage practices. Almost every producer in Oregon can reduce or replace some of their energy use. And I hope the resources will continue to be available to assist the industry with their efforts.”

Tom Fessler

Agricultural perspective

Agriculture is an energy intensive industry. Most of the energy comes directly from the sun, is captured by plants through photosynthesis, and transformed into food eaten by animals and people.

Additional energy inputs are added in the form of petroleum fuel, fertilizers, and electricity. Most fossil fuels such as petroleum, coal, and natural gas provide compact and transportable power. Negative environmental impacts can result from the process of extracting, processing and using energy. The US is dependent on other countries—some not always friendly to our interests—for many of these energy sources. And with the staggering increase in energy costs the past few years, many alternatives are being explored.

Oregon agriculture has great opportunity in the fields of renewable energy and energy efficiency. Oregon farms and ranches create many potential feedstocks to generate energy and fuels, and can develop energy facilities such as solar photovoltaic systems, wind turbines, small hydropower facilities, and geothermal systems. A variety of tools and practices are available to producers to reduce energy use and costs. Technologies and incentives for renewable energy and energy conservation are improving almost daily.

The Oregon Department of Agriculture supports and shares the vision of an initiative called “25 x ‘25,” which has the goal that by 2025, America’s farms, forests, and ranches will provide 25 percent of the total energy consumed in the United States, while continuing to produce safe, abundant, and affordable food, feed, and fiber.

The challenge

To bring energy efficiency and renewable resources into large scale commercial production is comparable to first putting humans on the moon. It requires a proper level of commitment, leadership, and funding to match the vision.

The US has enough wind resources to supply 20 to 25 percent of the nation’s electricity supply. Biofuels

from conventional and new crops can help with the transition by contributing 15 to 20 percent more to the transportation fuel resources. Solar power, geothermal energy, and other renewable resources have barely been tapped in the US and Oregon.

Policy recommendations

- Continue to support the renewable portfolio and fuel standards, incentives, and resources established by the 2007 Legislature and previous sessions.
- Support scalable technologies that enable farmers to produce their own electricity, fuels, and other energy inputs.
- Support the research centers in Oregon that can develop leading edge technologies in nano-sciences and bioengineering to catapult energy sources to the next stage of productivity and commercialization.
- Support an entrepreneurial environment in Oregon that will encourage new businesses to start, locate, and stay in Oregon to manufacture renewable energy technology, machinery, components, and knowledge centers.
- Support research and initiatives to conserve energy, in addition to finding alternative energy sources.
- Identify potential energy efficiencies in agricultural systems.



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