

DEPARTMENT OF ANIMAL
and RANGELAND SCIENCES

STRATEGIC PLAN 2023



Oregon State
University

**DEPARTMENT OF
ANIMAL and
RANGELAND SCIENCES
2023**

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AN INTRODUCTION TO THE DEPT. OF ANIMAL AND RANGELAND SCIENCES

Oregon is a state with amazing and diverse agricultural, environmental, social and natural resource landscapes. The State is home to a vast variety of ecosystems and land uses which face energy, ecological, extraction, production and management challenges and opportunities.

Background and History

The Department of Animal and Rangeland Sciences at Oregon State University, like other Land Grant Universities, originated with federal legislation. The Morrill Act of 1862 established Oregon State College as the state's institution "to teach such branches of learning as are related to agriculture and the mechanical arts." In 1887, the Hatch Act established agricultural experiment stations, in connection with colleges in several states, to strengthen agricultural research and promote technological innovation. The Smith Lever Act of 1914 established a system of cooperative extension services connected to these land-grant universities to inform the public about ongoing developments in agriculture, home economics, public policy/government, leadership, 4-H, economic development, and coastal issues. It is within the context of these historic national and state priorities that the department has become distinguished for its teaching, research and extension activities.

Oregon State University's Department of Animal and Rangeland Sciences is one of a handful of programs of its type in the northwestern United States and it offers the only accredited Rangeland Sciences program on the west coast. The origins of what is now recognized as the Department of Animal and Rangeland Sciences (AnRS) can be found in courses taught in animal husbandry at Oregon Agricultural College beginning in 1907. Dairy and poultry husbandry began in 1920. In the early 1930's, a Division of Animal Industries was formed that included animal, dairy, and poultry husbandry. Withycombe Hall was dedicated in 1952 as the home to the programs that would forge the current Department of Animal and Rangeland Sciences. Dairy and Animal Husbandry were merged in 1954. The departmental names were changed to Animal Sciences and Poultry Science in 1970 and the two departments were merged once more with other programs under the name Animal Science in 1991. The Rangeland program grew within Animal Science beginning with the first course offered in 1917 and a full four year curriculum started in 1949. The Rangeland Resources program became a department in 1981 and the name was later changed to Rangeland Ecology. In 1987 the Department of Rangeland Resources received its first accreditation by the Society of Range Management. The two departments of Animal Science and Rangeland Ecology merged to form the Department of Animal and Rangeland Sciences in 2012.

Departmental Description: How We Work

The functions of the Department of Animal and Rangeland Sciences are carried out at various facilities throughout the state. The Oregon State University Campus houses classrooms, E-campus, laboratories, farms, and faculty offices. The Eastern Oregon Agricultural Research Center (EOARC) in both Burns and Union house and support Animal and Rangeland faculty and research. Additionally, there is an OSU program on the campus of Eastern Oregon University in La Grande that offers a Rangeland Science BS degree and Animal Science minor. These degrees are conducted by EOARC faculty members. The Department of Animal and Rangeland Sciences has ten research farms and units (beef, dairy, horse, sheep, swine, poultry, meat lab, steer-a-year, farm services, Hogg Animal Metabolism Barn) covering 3,000 total acres in Corvallis.

On the main Corvallis campus, there are nine tenure track faculty, 13 instructors, five professional faculty, and four staff members who provide instruction and conduct research on the main campus. Additionally, the department participates in promotion and tenure decisions for 14 faculty members at the Eastern Oregon Agricultural Research Centers or in Extension.

The Department of Animal and Rangeland Sciences has an operating budget of \$4,972,374 (FY22). The expenditures of the department are \$6,160,523 (FY22). Additionally, the department greatly benefits from endowments held by the Oregon State University Foundation. Endowments are \$13,086,733 (FY22). These endowments provide ongoing support for graduate students, student scholarships, professorships, research and extension programs. There are also other gifts and grants received on an annual basis by the Foundation to benefit AnRS students and faculty research.

The Department is dedicated to the success of its students and the vibrancy of the industries dependent upon animal and rangeland sciences. All Departmental students achieve student learning outcomes depending upon

their selected area of study. These learning outcomes serve as a “contract” with the students to ensure they receive the knowledge and skills necessary to be successful and to improve the industry.

Animal Sciences Student Learning Outcomes

Students will be able to:

1. Demonstrate the use of discipline-specific scientific information in written and spoken formats using citation.
2. Identify anatomy and physiology of organ systems and describe hormonal function in the male and female reproductive tracts of mammals and poultry
3. Classify and compare anatomy, physiology, and nutritional status of commonly-raised domesticated animal species
4. Identify interactions of genotype and environment which produce phenotypes adapted to human uses
5. Apply the methods used to evaluate animal health and well-being.

Rangeland Sciences Student Learning Outcomes

Student will be able to:

1. Develop a vegetation monitoring plan, including sampling design, methods, analysis and interpretation, to meet land management objectives.
2. Interpret a site evaluation using quantitative data and ecological principles to predict the effects of management actions on ecological processes.
3. Calculate available forage and develop a grazing management plan that balances available forage with livestock and wildlife demand while meeting management objectives including delivery of ecological services.
4. Formulate action plans to address complex natural resource challenges through the application of professional communication skills, consensus-building and facilitation of stakeholder participation
5. Evaluate habitat selection by animals throughout life history stages and season based on resource availability.

STRATEGIC FRAMEWORK

The Department of Animal and Rangeland Sciences (AnRS) conducts its activities throughout the state within the broader context of Oregon State University, the College of Agricultural Sciences and the state’s network of Branch Experiment Stations and Extension offices. The missions of these institutions, along with national scientific initiatives and disciplinary directions, provides a framework in which the department’s strategic plan rests.

Oregon State University Mission

As a land grant institution committed to teaching, research, and outreach and engagement, Oregon State University promotes economic, social, cultural and environmental progress for the people of Oregon, the nation and the world. This mission is achieved by producing graduates competitive in the global economy, supporting a continuous search for new knowledge and solutions, and maintaining a rigorous focus on academic excellence, particularly in these three Signature Areas:

1. Advancing the Science of Sustainable Earth Ecosystems.
2. Improving Human Health and Wellness, and
3. Promoting Economic Growth and Social Progress.

College of Agriculture Mission

College of Agricultural Sciences recognizes that Oregon is unmatched in the density of its diverse agricultural, environmental, and social landscape. As the founding college of the state’s land-grant institution dedicated to serving all Oregonians, the College stands at the crossroads of conservation and production. We find creative

solutions at the confluence of diverse perspectives. As champions of science, we embrace differences to find common ground and create opportunity—committed each day to make tomorrow better.

Our inherent strengths and aspirational opportunities through which we will advance that unifying purpose, include:

1. Agricultural Competitiveness and Resilience,
2. Food Innovation for Health, Markets, and Access,
3. Coastal Food Systems and Conservation, and
4. Working and Natural Landscapes.

Agricultural Experiment Station Mission

The Oregon Agricultural Experiment Station is the principal agricultural research agency in the state. Its mission is to conduct research in the agricultural, biological, social, and environmental sciences for the economic, social and environmental benefit of Oregon.

Oregon State University Extension Mission

The Oregon State University Extension Service engages the people of Oregon with research-based knowledge and education that strengthen communities and economies, sustain natural resources, and promote healthy families and individuals.

National Institute of Food and Agriculture – NIFA Climate Adaptation and Resilience Plan 2022

The National Institute of Food and Agriculture (NIFA) “provides leadership and funding for programs that advance agriculture-related sciences.” The Agency invests in and support initiatives that ensure the long-term viability of agriculture. NIFA applies an integrated approach to ensure that groundbreaking discoveries in agriculture-related sciences and technologies reach the people who can put them into practice. NIFA has the following program priorities:

- ▶ Develop new opportunities to address climate change vulnerabilities.
- ▶ Encourage stakeholders to adapt their science to climate change.
- ▶ Take an integrated systems approach to climate change programming.
- ▶ Integrate climate change into agency-wide planning processes.
- ▶ Increase interagency coordination for climate change science.
- ▶ Adapt NIFA granting procedures to climate change.
- ▶ Examine reporting mechanisms to track climate change expenditures and impacts.
- ▶ Improve NIFA’s workforce flexibility to better adapt to climate change.
- ▶ Increase outreach to stakeholders about NIFA climate change activities, opportunities and data.

The national focus of federal agencies is on mitigating the effects of climate change while increasing nutrition.

American Society of Animal Sciences Grand Challenges

The American Society of Animal Science (ASAS) is the world’s leading source of scientific information on animal well-being and the contributions of animals to human health. In 2022, The ASAS Grand Challenges document was prepared to address priorities, provide science-based information for public policy, and to enhance funding opportunities for research and education programs in animal science. The ASAS Grand Challenges facing animal production are:

- ▶ To optimize the health and productivity of animals in a manner that protects and enhances human health.
- ▶ To produce animal proteins in an economically, environmentally and socially acceptable manner that meets the demands of an increasing population.
- ▶ To ensure that animal scientists develop and disseminate strategies for mitigation and adaptation with increasing climate variability.

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- ▶ To develop intervention and control strategies for foodborne contaminants along the entire animal production chain and enhance detection of pathogens to ensure a safe food supply and decrease foodborne illnesses.
 - ▶ To optimize animal well-being in a socially acceptable and sustainable manner
 - ▶ To optimize and ensure responsible and sustainable use of water.

The Department of Animal and Rangeland Sciences focuses primarily on “Agricultural Animals and Climate Change” priority to ensure that animal scientists develop and disseminate strategies for mitigation and adaptation to increasing climate variability. Just as animal agriculture affects climate change, climate change affects animal agriculture. The prediction that the global human population will double by 2050, creates a challenge to produce more food with fewer resources in a changing environment. Nationally, and internationally, mitigating climate change while increasing food production is of critical importance. This is the central challenge for the work of the department of Animal and Rangeland Sciences.

OUR VALUES AND COMMITMENTS

National trends, strategic goals, and organizational history provide the framework for strategic planning. Additionally, these strategies are fulfilled within a context of personal, professional, and organizational values and ethics. The faculty and staff members of the department are committed to the following guiding values, principles, responsibilities, commitments, and practices as expressed by the University and the College of Agriculture:

As a member of the Oregon State University family, we honor these commitments. We will be:

- ▶ innovators and collaborators with our students in research to drive solutions.
- ▶ the source of excellent education for all learners.
- ▶ leaders in the delivery of education.
- ▶ welcoming and foster belonging and access for all.
- ▶ visionary in our integration of the arts, humanities, sciences, and engineering,
- ▶ accountable leaders.
- ▶ agile and entrepreneurial.
- ▶ mindful of this special place and all Oregonians.

Members of the department adhere to the following College values:

- ▶ We are responsive to the needs of those we serve.
- ▶ We are a reliable source of credible, evidence-based information and education.
- ▶ We partner with individuals, organizations, businesses, and stakeholders beyond OSU.
- ▶ We include diverse perspectives in our research, outreach, and educational efforts.
- ▶ We foster mutual respect among ourselves and the broader community.
- ▶ We are accountable for stewardship of resources and for fulfillment of our missions.
- ▶ Additionally, the Animal and Rangeland Science team members place a high value on:
 - ▶ Respect and value stakeholders, students and the communities served.
 - ▶ A culture of professional excellence and accountability within a flexible, independent, diverse, equitable, and inclusive environment that recognizes and takes pride in high quality work by being honest, transparent, reliable, and relevant.
 - ▶ Effective internal communication that is timely, accessible and transparent and external communications that fully engages the interests of stakeholders and students.
 - ▶ Innovation, creativity, and problem-solving in an environment where it is safe to fail.
 - ▶ Positive interpersonal relationships that emphasize inclusivity, respect and compassion, appreciation of compromise, mutual support and collegiality.

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- ▶ Resilience through sustainable and competitive practices
 - ▶ Collaborations across departments, colleges, disciplines, Animal and Rangeland Science faculty, students and stakeholders.

It is within the context of the goals and values University, College, Extension and Experiment Stations, National Educational organizations, funding sources, professional associations, and the state of Oregon that this plan is developed and ultimately realized.

THE STRATEGIC PLANNING PROCESS

The Head of the Department of Animal and Rangeland Sciences in concert with the Dean of Agriculture agreed upon the need for a seven-year strategic plan. The purpose of the plan is to guide the Department's alignment and development in response to organizational changes, deferred maintenance and integrated programs. Departmental retirements created the opportunity to improve core competencies, make best use of existing resources and personnel, and change the departments trajectory.

Strategic Planning Retreat

The purpose of the strategic planning process is to create a simple guiding document for the Department. This strategic plan integrates and aligns University, College and Department plans toward a common end. The plan makes use of the advice and direction of national organizations and local assessments and reports. This final product is this written report that can be used to guide the development of the Department's operational and programmatic plans and to recruit new partners to achieve the strategic objectives. Faculty members and staff engaged in three sessions of strategic planning during a three-day departmental retreat held from June 21-23, 2022. These meetings consisted of a "SWOT" analysis, values clarification, review and responses to national trends, community input, and the establishment of goals and objectives.

On June 21, 2022, faculty and staff members met on the first day to conduct the "SWOT" analysis to identify strategic directions. Participants completed an environmental scan of various agricultural and community interests. The primary focus was on the "opportunities" and the "threats" the Department may face in the next seven to ten years. Participants focus on how to address these threats and increase opportunities. There was also a secondary analysis of the "strengths" and "weaknesses" of the Department to assess the organization's ability to respond to these opportunities and threats.

On June 22, 2022, participants reconvened to identify key strategic areas of interest and various methods to address issues, opportunities and concerns. On June 23, 2022, the participants met to review the first draft of their strategic objectives. The strategic planning process was guided by the Community Agreements for Real Engagement (CARE) Commitment (Appendix C). The document was reviewed by all participants during the first meeting and prior to planning. The methods outlined in the document were fully utilized during the planning process.

The strategic planning process is to first ensure alignment with, and advancement of, the interests and goals of the College of Agricultural Sciences. The achievement of the stated goals and objectives rest with the creation of measurable operational objectives drawn from the strategic objectives. These specific working objectives are linked to the action plans of faculty and staff members. Each person on staff, along with other OSU faculty and administrators, and community partners will be given various responsibilities, actions, and objectives (job descriptions) over an extended timeline. These deliverables are met by adjustments and alignments to employee workloads, opportune moments, and emergent needs within the Department. They are constantly informed by the strategic objectives and guiding values. Assessment of work activities and outcomes will be a regular part of plan assessment and employee annual review and the promotion process.

Strategic Planning Needs Assessment

A list of alumni and stakeholders was compiled with input from the department and OSU Foundation. All were contacted by email and provided the questions for the survey (Appendix A) and asked to set up a 30-minute appointment with the department head to provide responses to the survey. Their responses were summarized and used to clarify and rank strategic priorities for the department.

ENVIRONMENTAL ASSESSMENT SUMMARY – SITUATIONAL ANALYSIS

A “SWOT” analysis is an assessment of the strengths, weaknesses, opportunities, and threats confronting an organization. The “SWOT” analysis yielded the following results:

Departmental Strengths

The SWOT analysis identified departmental strengths that can be applied to these internal challenges.

- ▶ Strong current departmental leadership supported by a cohesive administrative team with support from the Dean, Branch Experiment Station Director and other key administrators who acknowledge the importance of programs
- ▶ Development and implementation of the OSU Cattle Plan
- ▶ A work culture that fosters enthusiasm, resilience, resourcefulness, and a collegial and collaborative atmosphere as demonstrated by the passion and subject knowledge of faculty and staff.
- ▶ Strong undergraduate and graduate demand, experience with collaborative partners and an opportunity to have a lasting effect on regional agriculture and natural environments.
- ▶ Availability of a diverse program through multiple teaching modalities and locations
- ▶ An awareness that Oregon public and private lands require a well-integrated research and extension program throughout the state to serve stakeholders in Oregon’s diverse ecosystems.
- ▶ Breadth of expertise, experiences, knowledge and backgrounds of the faculty and staff of the department.

Departmental Weaknesses

Various obstacles and challenges to achievement of the Department’s mission were identified during the planning process. Internally, the following weaknesses were identified:

- ▶ A need to identify optimal communication channels and stakeholder outreach methods
- ▶ Disruptive changes in university administration, college policies, business office and human resources, and promotion and tenure can create confusion, distrust, and occasionally trauma
- ▶ The changing attitudes and needs of students that became evident during the COVID crisis.
- ▶ There is a research funding mismatch between the interests of stakeholders and funding sources.
- ▶ A lack of funding for personnel including professional development, program capacity building, clubs and teams, travel, graduate students, scholarships, support staff, lower faculty/student ratios.
- ▶ A need for periodic curriculum review and updates
- ▶ Research requires focus but can result in tunnel vision and “academic silos”
- ▶ Poor and old facilities and equipment
- ▶ No on-line Animal Sciences degree
- ▶ Inadequate graduate student curriculum
- ▶ The faculty, staff, and resources are often spread too thin to meet the quality and quantity standards of the department (especially given the large spatial footprint in the state).
- ▶ Being somewhat disconnected due to a lack of knowledge and communication about areas of expertise, specialization, current activities, on and off campus resources and actions, and conflict between competing interests.

Opportunities to Pursue

The SWOT analysis identified a variety of potential opportunities that the department could strategically pursue.

- ▶ Have a strategic internal and external communication plan to articulate needs to funders/partners, stakeholders and students by painting a picture of where we want to be and what we need to get there.
- ▶ Enhanced and expanded faculty collaborations to meet designated challenges for research

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- ▶ New faculty hiring opportunities
 - ▶ The pandemic introduced new tools for communication and connectivity to improve and streamline educational processes
 - ▶ Experiential learning to diversify the curriculum, enhance student experiences, and leverage extension locations in teaching
 - ▶ External PNW regional collaborations and multi-disciplinary research and educational partnerships between faculty, departments, campuses with applications in education, research, extension and technology.
 - ▶ Recruit out-of-state undergraduate students
 - ▶ Maintain and build upon the department's good relationship with college administration
 - ▶ Capacity to raise annual, major, and endowment gifts through the OSU Foundation
 - ▶ Good stakeholder relationships, increased interactions with federal and state agencies and NGOs, our role as facilitator and extension communicator, and service to the public and groups (e.g.: EFL, AHI)
 - ▶ The use of animals, diverse facilities and experiment stations to fulfil the mission

External Threats

There are clear and opaque external threats to the department that must be acknowledged. Some of these may be addressed in a strategic plan. Others may require participation or partnership with other organizations or agencies to reach a common result.

- ▶ Competition for, and reliance on, public funding during a recession
- ▶ Public distrust of science and education and a negative perception of agriculture and industrial funded research in a period of shifting social priorities
- ▶ Administrative overload caused by overwhelming learning requirements for new skills and use of technology, increasingly burdensome OSU administrative policies, and resulting and continuing attrition.
- ▶ Unrealistic student expectations with what educators perceive as entitled students with an expectation of instant gratification while being generally disinterested.
- ▶ Animal rights activism that impedes research and engenders anti-agricultural public perception due to a general lack of dialog between competing interests.
- ▶ Faculty and staff hiring and retention due to inflation, policies, legislative issues, and funding priorities and mandates.
- ▶ Faculty distrust created by a lack of follow-through on previous strategic plans
- ▶ Environmental pressures big and small including climate change, land development, demographic shifts, population growth, environmental changes, funding, etc.
- ▶ Employee burn-out due to job demands, work overloads, mental and physical stress, and trying times.
- ▶ Demand for rapid and unpredictable changes in systems, personnel, and reporting changes within a slow-moving bureaucratic institution without requisite support to make such changes.
- ▶ Risks to farms including encroachment on agricultural lands close to campus, neighbors, adequate funding, underutilized farm research capacity.
- ▶ Competition with other departments, colleges, and universities for resources.

Community Survey Results

Individual email requests for meetings, including survey questions, were sent to alumni and departmental stakeholders in March 2023. The meetings were conducted to gather survey responses by the department head in April through June 2023.

Findings include:

Perceived strengths of the department

- ▶ The student experience which included experiential learning, fostering development of cohorts of students, and building relationships with faculty.

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- ▶ Stakeholder interaction and connections with the industry.
 - ▶ Providing impartial research which can be used in many different ways

Perceived weaknesses of the department

- ▶ The students coming into the department no longer have agricultural backgrounds and when they graduate they do not know how to apply their knowledge in job situations.
- ▶ The facilities are old and have not been updated.
- ▶ Stakeholders comment that not enough research is aligned with their interests, not enough communication about the department and branch experiment stations to the public, and there is a perception that faculty stay in Corvallis and do not engage out in the state.

Perceived opportunities for the department

- ▶ In the area of teaching the curriculum could be aligned with emerging markets, the curriculum could address workforce challenges to make graduates career ready, and develop an E-campus degree in animal science.
- ▶ Sustainability/regenerative agriculture came up repeatedly with an emphasis on being able to measure and verify performance.
- ▶ Provide a food production orientation for the department; this starts with student run retail outlet coming to Withycombe during the renovation and could make OSU and Corvallis a destination through continued partnership with the department of food science and technology.

Collaborations needed to tackle current animal and rangeland science issues in Oregon and beyond

- ▶ The sustainability/regenerative agriculture space needs long-term research to develop a credible database. OSU can be the leader guiding dialogue based on science.

Receiving of communications from the department

- ▶ Overwhelmingly, the people surveyed wanted to receive communications electronically and with small amounts of information at a time.

Thematic areas for research, teaching and extension

- ▶ Sustainability/regenerative agriculture
- ▶ Emerging and evolving markets
- ▶ Production agriculture

Ranking of importance of collaborations, communications, and thematic areas

- ▶ The people surveyed ranked building out thematic areas for research, teaching and extension over expanding collaborations to tackle current issues by one vote. Developing an external communication strategy was categorically seen as the lowest priority.

Cattle Plan

The strategic planning process also considered the recent development of an OSU Cattle Plan and Farm Review Report. These reports provide additional goals for the department to address as part of their overall strategic activities.

In 2021, The Department of Animal and Rangeland Sciences completed the OSU Cattle Plan. The purpose of the plan was to align cattle operations with university needs and within budget constraints. The department has made substantial and early progress addressing needs that were identified in the Plan. As part of the planning process, a needs assessment was conducted with representatives from the Beef and Dairy Industries in Oregon. Two major themes emerged from the assessment: 1) approach departmental work from the perspective of stakeholder needs, and 2) make improvements in both facilities and the operation of those facilities. Community representatives validated the need for immediate operational changes to better serve students and Oregon industry and citizens.

Farm Review Report

In addition to the Cattle Plan, The Department of Animal and Rangeland Sciences conducted a complete and comprehensive farm unit review. Results of the review were used to develop the following farm unit goals:

1. Size the animal operations to the size of the department's current facilities.
2. Break even with expenses for all farm units combined.
3. Moving forward, decisions about animals and unit infrastructure will be seen through the lens of research and teaching and research and teaching will take priority.

DEPARTMENTAL VISION AND MISSION

The Department of Animal and Rangeland Sciences is guided by the following vision and mission:

Our vision is ecologically, socially, and economically resilient communities and healthy landscapes in synergy with humans, animals, and rangelands for current and future generations.

Our mission is to serve current and future communities through education, research, and outreach by providing science-based animal and rangeland information.

STRATEGIC GOALS

The College of Agriculture has established two areas of strategic advantage: Agricultural Competitiveness and Resilience and Working and Natural Landscapes that align with the vision and mission of the Department.

Agricultural Competitiveness and Resilience

The world population is expected to substantially increase over the next 30 years, this growth paired with global climate change, among other circumstances, will impact the ability to sustainably feed and support this growing population. To meet this challenge, agriculture in Oregon, in the United States, and globally must aim to become more sustainable, resilient and diverse. While all six of the ASAS Grand Challenges are important, the department will focus on the challenges faced by agricultural animals during rapid climate change as well as the effect these animals have on climate change itself.

Working and Natural Landscapes

Oregon is known for its extremely diverse landscapes and waterways. Oregon's economy is largely powered by various forms of agriculture, fishing, and hydroelectric power. Oregon is also one of the top timber producers in the United States. One of the challenges facing Oregon's diversity in landscapes, cropping and grazing systems, and ocean environments is the vast diversity of opinions in how to best allocate and manage these resources. Additionally, 53% of the land mass in Oregon is federally managed with public allotments for grazing; this is where land management and animal agriculture intersect. OSU is equipped to address working and natural landscape challenges by having large collaborative networks of OSU researchers and teachers with broad expertise in almost all areas of agricultural and natural resources research and outreach across the state. Strong ties to stakeholders, communities, and agencies will allow us to be responsive to emergent challenges and provide scientifically expertise related to sustainable landscape management.

After careful consideration of national trends, university and college commitments, organizational history, current conditions and departmental capacity, the following strategic goals will be pursued:

Goal 1: Expand research, education, and outreach collaborations to take advantage of multi-disciplinary perspectives, experiences and facilities.

Goal 2: Educate students to be successful in their academic pursuits, professional careers and life.

Goal 3: Build departmental thematic areas/strategic areas/critical mass/niches through strategic hiring and retention of faculty.

Goal4: Develop and Implement a Strategic Internal and External Communication Plan to improve branding, advertising social media presence, outreach, education, public understanding, networking, collaboration, marketing, and fundraising consistent with the other goals of the AnRS Strategic Plan 2023-2029.

Goal 5: Have a comprehensive fund raising and Capital Campaign proposal/plan to aggressively pursue funding and other resources for departmental personnel, programs. facilities, and equipment.

STRATEGIC GOALS AND OBJECTIVES

Goal 1: Expand research, education, and outreach collaborations to take advantage of multi-disciplinary perspectives, diverse experiences and facilities.

Background

Strategic planning participants identified the opportunity for the department to take a leadership role in Pacific Northwest AnRS collaborations. Numerous collaborative opportunities were identified within the department through the Cattle Plan and OSU Farm Review, including development of facilities, use of technology, and pursuit of external funding.

Objectives

Objective 1.1: Take leadership roles in Pacific Northwest animal science and rangeland science collaborations to make best use of scarce research and program funding in the region

Objective 1.2: Develop departmental, college, and regional collaborations to make best use of scarce research and program funds

Objective 1.3: Use the recommendations of the Farm Review to better utilize facilities and foster collaborations

Objective 1.4: Participate in cultural events on and off campus each year to learn about other perspectives and opportunities in the field.

	Key Actions	Responsibility
1.1a	Faculty assume leadership roles in regional and national professional societies	Faculty
1.1b	Faculty lead research, teaching and Extension collaborations with Washington State University and University of Idaho	Faculty, Department Head and College if formal MOUs required
1.2a	Form partnerships within the college to expand the use of college funding initiatives	Department Head
1.2b	Initiate research and teaching collaborations outside of the department	Faculty
1.3a	Improve existing facilities with a focus on improvements affecting the largest number of users with college funding opportunities and OSU Foundation Endowments	Department Head, Associate Department Head, and Director of Livestock Operations
1.3b	Plan and build new facilities to enhance research and experiential learning	Department Head and Associate Department Head
1.3c	Expand the use of farms and units through research, teaching, and Extension	Faculty and Director of Livestock Operations
1.4a	Incorporate diversity, equity and inclusion into all goals of the strategic plan	Departmental DEI Committee

Results

Implementation of the farm review will better utilize facilities and create new opportunities for collaboration by maintaining and renovating buildings, improving technological utilization, and ensuring research and educational relevance. Leadership in the Pacific Northwest will allow the department to expand collaborative efforts and better utilize existing resources.

More enhanced collaborations with partners in the northwest will ensure better Informed decisions about mitigating the impacts of animals on climate change and adapting animals to a changing climate. The department seeks to Improve animal management and feeding systems with efficient production in an economically and environmentally sustainable manner. The department must maintain the appropriate infrastructure (e.g., laboratories, personnel, plans and policies) with long-term responsiveness to climate change in mind.

Goal 2: Recruit and educate students to be successful in their academic pursuits, professional careers and life.

Background

Student success is a result of the student educational experience. The Covid pandemic introduced new tools for connectivity and teaching challenging topics. Educators, stakeholders, and alumni have identified ways the department can better utilize the full range of teaching modalities, experiential learning, locations, and teaching technologies to deliver a cost-effective education. The Department continues to see strong undergraduate demand but there is also a need to review and update the undergraduate curriculum and fully develop the graduate curriculum. Additionally, there has been a shift in Oregon's population where fewer young people grow up connected to agriculture yet the need for agricultural professionals remain. Providing the workforce needed for animal agriculture and land management will require both recruitment of students with agricultural backgrounds from Oregon and beyond and continuing to provide experiential learning throughout the curriculum for students that do not have an agricultural background when they enter OSU.

Objectives

Objective 2.1: Continue to utilize a broad array of teaching modalities, experiential learning and teaching technologies to deliver excellent, cost-effective education.

Objective 2.2: Increase and enhance efforts to recruit students.

Objective 2.3: Manage graduate and undergraduate student expectations for their learning environment and career opportunities

Objective 2.4: Engage faculty, staff and students in educational and skill building professional development activities to improve teaching outcomes and to create a welcoming environment for all.

Objective 2.5: Continue the periodic identification of target course enrollments and thresholds for each level of instruction to maximize educational efficiency while responding to differences in teaching modalities.

	Key Actions	Responsibility
2.1a	Utilize hybrid courses (intensive in field experience with asynchronous lectures based on field experience) to enhance learning and accessibility for all students	Faculty
2.1b	Have new technologies, computer programs, and best teaching practices as departmental professional development to enhance teaching effectiveness and learner experiences	Department Head and Teaching Curriculum Committee
2.1c	Ensure that the curriculum and teaching methods are meeting the diverse need of the students	Teaching Curriculum Committee and Peer Evaluation of Teaching Committee
2.2a	Develop a recruitment team that can travel with college and university recruiting efforts including identifying potential students to recruit	Department Head and Head Advisor

2.2b	Develop and deliver pre-college programming specifically addressing the needs of underrepresented populations, particularly through partnerships with Oregon Open Campus, 4-H, and FFA where available	Head Advisor, Faculty, and DEI Committee
2.3a	Develop clear and consistent learning environment expectations for undergraduate and graduate students and communicate them through multiple channels. Reassess periodically and provide professional development for faculty.	Head Advisor and Faculty
2.4a	Bring professional development opportunities to the department	Department Head, Associate Department Head, and various departmental committees

Results

Departmental outreach, improved services, and recruitment will build and maintain a steady flow of undergraduate and graduate students matched to the capacity of the department helping meet critical workforce needs in animal agriculture and land management. Animal and Rangeland Sciences will broaden its use of teaching modalities, experiential learning and teaching technologies to reach a more diverse audience with more effective teaching processes. The “contract” with students will be used to measure and manage graduate and undergraduate student expectations and to enhance learning outcomes.

Goal 3: Build departmental thematic areas/strategic areas/critical mass/niches through strategic hiring and retention of faculty

Background

The department has a breadth of expertise in many facets of Animal and Rangeland Sciences but due to faculty departures there is very little depth in any one area. Additionally, the faculty departures have left the department with more professional faculty that teach than tenure track faculty that conduct research. Personnel needs were identified in both the Cattle Plan and Farms Review. Research collaboration is the current model being used by federal funding agencies for larger grants. Developing strategic research areas with faculty collaborations within and outside the department should allow for larger grants to address stakeholder needs.

Objectives

Objective 3.1: Use the ASAS Grand Challenges, and similar professional society documents, as the guiding document to maintain relevancy, responsiveness and effectiveness and identify strategic focus areas

Objective 3.2: Seek priority staffing funds

Objective 3.3: Ensure appropriate “on-boarding” experiences as an introduction to a welcoming and supportive environment

	Key Actions	Responsibility
3.1a	Faculty will meet regularly to develop coursework, research collaborations, and Extension programming	Faculty
3.1b	Research faculty will meet to determine the research themes based on current competencies and interest	Faculty, Department Head, and Associate Dean of Research
3.2a	Apply for tenure track faculty lines every time the opportunity presents itself	Department Head
3.3a	Development a comprehensive on-boarding document for faculty, staff and student workers	Department Head and Administrative Manager
3.3b	Develop a mentoring system, including best practices, for the department for all faculty that is in place through the terminal promotion	Department Head and Department Head Advisory Committee

Results

The department has hired three, tenure-track faculty members that were outlined in the Cattle Plan. Prioritization of future positions was developed during the strategic retreat and took into consideration the Cattle Plan, Farms Review, and curricular teaching needs. Those positions, in order, are:

1. Withycombe Reproductive Physiology Chair
2. Non-ruminant nutrition focusing on pet food
3. Landscape ecology
4. Animal genetics
5. Animal welfare
6. Restoration Ecology

Additionally, research collaboration was a cornerstone of the lab design in the renovation of Withycombe Hall. The open, shared laboratory space will create more collaboration. Also, there are conference rooms on every floor to encourage joint lab meetings.

Goal 4: Develop and Implement a Strategic Internal and External Communication Plan to improve branding, advertising social media presence, outreach, education, public understanding, networking, collaboration, marketing, and fundraising consistent with the other goals of the AnRS Strategic Plan 2022-2030.

Background

In the past, various ways of communicating inside and outside of the department have been used prior to the Covid disruption. Most of the previous communications, especially to stakeholders, had not advanced with technology. The department needs to be strategic in how the message is disseminated to ensure consistent and continual messaging. Communication within the department is more transparent than it has been in the past, but improvement can be made.

Objectives

Objective 4.1: Develop a comprehensive external communication strategy for employees, students, alumni and stakeholders.

Objective 4.2: Rebrand Animal and Rangeland Sciences as a scientific authority to address public misconceptions and stakeholder expectations.

Objective 4.3: Improve internal communication between faculty, staff and students throughout the state.

	Key Actions	Responsibility
4.1a	Initiate a new Communications Committee in the Department.	Department Head
4.1b	Identify the optimal communication channel between the department, alumni and stakeholder groups.	Department Head and Communications Committee
4.1c	Develop and maintain an ongoing communication list of departmental stakeholder categories, groups, members, and participants. Work with the OSU Foundation, OSU Alumni Association, Recruitment, and Registrar's office and local and regional offices to maintain updated information.	Head Advisor and Administrative Manager
4.1d	Create an annual calendar of stakeholder outreach and engagement activities.	Administrative Manager and Office Specialist 2
4.1e	Work with Agricultural Media and Communications to articulate and share the departmental "message" by painting a picture of what we do, why it's relevant, where we want to be, and what we need to do to get there. Fully utilize the Monthly Activity Report for story and promotional ideas.	Department Head, Faculty, and Communications Committee

4.2a	Be responsive to the public need for scientific information which informs public debate to navigate perceived conflicts through convening, facilitating and acting as an intermediary.	Faculty
4.2b	Address negative public perceptions, including student perceptions, that are specific to animal sciences and related industries.	Faculty
4.3a	Develop a resource directory of faculty expertise and specializations. Improve the departmental website to better reflect research interests and participation in CAS core themes.	Administrative Manager, Administrative Programs Specialist, and Communications Committee
4.3b	Bring back the departmental seminar.	Department Head

Results

The departmental website has been updated to the college standards. A clear message on the website that changes routinely can be used to inform future and current students and stakeholders. A survey of stakeholders found that they prefer to receive their information electronically and in smaller pieces. Additionally, a clear message will convey value to the people of Oregon and beyond.

Goal 5: Have a comprehensive fund raising and Capital Campaign proposal/plan to aggressively pursue funding and other resources for departmental personnel, programs, facilities, and equipment.

Background

Continual improvement of programs and facilities necessitate fund raising. The department already enjoys a generous OSU Foundation accounting that provides numerous scholarships and four named or endowed professorships. Still, there are needs that were identified in both the Cattle Plan and the Farms Review to upgrade equipment and create new and better facilities that will allow for greater animal welfare, student experience, and research critical to the stakeholders in Oregon.

Objectives

Objective 5.1: Participate in the University Capital Campaign

Objective 5.2: Increase the availability of scholarship and fellowship funds for undergraduate and graduate students by improved use of existing funds and the solicitation of additional financial support for diverse student needs in the future.

Objective 5.3: Increase access to federal research and program funding with expanded and new funding collaborations and partnerships.

Objective 5.4: Empower faculty to identify, cultivate, and solicit contributions in the fundraising process.

Objective 5.5: Create and maintain a Department External Advisory Committee.

	Key Actions	Responsibility
5.1a	Identify potential donors through departmental contacts	Faculty
5.1b	Develop materials for potential donors that list the opportunities to move the departmental facilities and people to future success	Department Head, Faculty, and OSU Foundation
5.2a	Work with OSU Foundation to allocate monies with in the current donor agreements to support students.	Department Head
5.2b	Develop compelling funding requests for future academic programing.	Department Head, Faculty, and OSU Foundation

5.3a	Work with the CAS Associate Dean for Research to identify potential funding programs and collaborations college wide	Department Head and Faculty
5.4a	Provide professional development for faculty about the fundraising process and the departmental goals	Department Head and OSU Foundation
5.5a	Determine size and scope of the department external advisory committee	Department Head and OSU Foundation
5.5b	Form the department external advisory committee and set regular meetings	Department Head, Administrative Manager, and Faculty

Results

The biggest result will be the renovated Withycombe Hall which will affect every student and employee of the department with enhanced student areas and modernized laboratories. Students and animals will have better experiences associated with experiential learning. Research activity in the department will be increased. The department will be better able to meet student and stakeholder needs.

ASSESSMENT OF OUTCOMES

Each key action within an objective can be quantified annually. When specific personnel of departmental committees are involved, this will be done during the Periodic Review of Faculty annually. The Department Head will report the previous years progress to department annually and review the objectives. Since this is intended to be a living document, departmental input on any changes to the strategic plan will solicited annually. In addition, the progress will be reported to stakeholders through the departmental website.

APPENDIX A: STAKEHOLDER FEEDBACK FOR STRATEGIC PLAN QUESTIONS

1. What do you think are the strengths, both historically and current, of the Department of Animal and Rangeland Sciences?
2. What do you think are the weaknesses, both historically and current, of the Department of Animal and Rangeland Sciences?
3. What do you think are the opportunities for the Department of Animal and Rangeland Sciences to capitalize on now and in the future?
4. What type of research, education and outreach collaborations are needed to tackle current animal and rangeland sciences challenges in Oregon and beyond?
5. How would you like to receive communication from the Department of Animal and Rangeland Sciences in the future?
6. What are current thematic areas for research, education and outreach that you see in the department? What are future thematic areas for research, education and outreach that you see for Animal and Rangeland Science to benefit Oregon and beyond?
7. Please rank the following in order of importance for building a stronger Department of Animal and Rangeland Sciences at Oregon State University from 1 (most important) to 3 (least important)
 - a. Expand research, education, and outreach collaborations.
 - b. Develop a strategic communication plan.
 - c. Build departmental thematic areas related to research and outreach such as smart agriculture using artificial intelligence, companion animals, carbon cycle and livestock, etc.