



UW College of Agriculture and Natural Resources
Global Perspectives Grant Program
Project Report Instructions

A brief written report must be submitted electronically to the AES office **within one month of returning from your trip**. Photographs supplementing the report are encouraged and are appreciated by the donor. Failure to submit a report may jeopardize future funding from AES.

In addition to forwarding these reports to our benefactor, reports will also be published on the AES website—do not include any photos that require permission to post to our webpage. Reports must be written in a style **understandable by the lay person** and may be edited for readability before being published to the AES website or the University of Wyoming Foundation report.

Format: Use 12 point type, single line spacing, and one inch margins. Submit your report to aes@uwyo.edu as a single PDF file.

Include the following information:

1. COVER PAGE

Award Period (e.g. Spring 2012): Summer 2022

Principle Investigator(s) Bridger Feuz and Brian Sebade **Department:** UW Extension **Email:** bfueuz@uwyo.edu and bsebade@uwyo.edu

Project Title from Application: Understanding Swiss High Altitude Grazing Systems and Potential Adaptations for Wyoming

Amount spent: \$7,650

Non-technical summary (max 1500 characters plus spaces): Provide a one paragraph non-technical summary that most people can understand.

In August of 2022, Bridger Feuz and Brian Sebade traveled to Bern, Switzerland. The purpose of the trip was to connect with Dr. Beat Reidy at Bern University of Applied Sciences, School of Agricultural, Forest, and Food Sciences to understand and learn about livestock grazing of high-altitude systems in Switzerland and how that compares and contrasts to that of Wyoming systems. To develop a baseline of grazing systems of Wyoming and Switzerland, several lectures were provided to us from Dr. Reidy and from his lab of graduate students. We reciprocated with an overview of Wyoming's agriculture to our Swiss counterparts. While Switzerland receives more annual precipitation, and in many parts of the country more growing days, some of the same challenges still exist between Wyoming and Switzerland. Managing the cost of supplemental feed, labor, grazing in variable climatic conditions, and marketing products are all challenges that both regions face. We had the opportunity to share the Wyoming Ranch Tools with our counterparts in Switzerland and share what we do in Wyoming to help face the challenges of labor, cost of supplemental feed, and grazing challenges. We were able to get a

better insight for how marketing of ag products is done in Switzerland and what managers are doing in Switzerland to be more profitable and better grazing managers. Finally, we had the opportunity to see what researchers are doing to increase legumes in pastures for increased nutrition. Adding legumes to irrigated pastures is a challenge for land managers in Wyoming.

2. REPORT: Maximum of two pages of text; in addition, please also include **photos**. Must be written in a style understandable by a general audience.

In August of 2022, Bridger Feuz and Brian Sebade traveled to Bern, Switzerland. The purpose of the trip was to connect with Dr. Beat Reidy at Bern University of Applied Sciences, School of Agricultural, Forest, and Food Sciences. While in Switzerland there were four main objectives: 1) learn about grazing systems at high and mid-elevation in Switzerland. 2) Understand the niche marketing practices utilized by Swiss producers to capitalize on local tourism. 3) Create a workshop for Wyoming producers addressing high alpine intensive grazing as well as niche marketing of livestock products to the Wyoming tourism market. 4) Share the calculators on the Wyoming Ranch Tools Website with Swiss producers.

To develop a baseline understanding of grazing systems in Wyoming and Switzerland, several lectures were provided to us from Dr. Reidy and from his lab of graduate students. We reciprocated by presenting to the Swiss counterparts. We met at the Bern University of Applied Sciences, School of Agricultural, Forest, and Food Sciences. At the University, we were provided with a tour of their facilities and shown some of the current experimental trials for forage production.

Next, we spent several days touring various farms and livestock operations with Dr. Reidy. We toured farms at different altitudes and different regions of Switzerland. We were lucky enough to tour farms at the three main ecoregions of Switzerland. We started by touring farms of the Alps region on the southern end of the country. Next, we toured farms of the central plateau where the majority of vegetable crops and other forage crops are grown and harvested commercially. The final stop was at the northern end of the country near the Black Forest of southern Germany and Eastern France.

While touring Switzerland and based on information from the lectures and discussion provided to us, we learned Switzerland receives more annual precipitation and in many parts of the country has more growing days than Wyoming. Yet, both Wyoming and Switzerland share some of the same challenges such as high prices and sometimes a lack of supplemental feed during drought and winter feeding, labor shortages, predator issues (wolves), high fertilizer prices, methods for direct marketing goods, and maintaining and improving pastures in harsh climates.

Touring the country gave us a first hand look at what goes into a viable agriculture operation in a different country and a different continent. Switzerland's agriculture is highly subsidized by their federal government. Some of the choices made by agriculture producers is greatly influenced by credits awarded for certain practices. It was also amazing to us that for the amount of grazing that occurs in natural areas with native wildlife and high numbers of

recreationists that there is not more conflict in Switzerland. The Swiss people seem to embrace agriculture as part of their heritage and community. There are far more conflicts in the Western United States between these groups than was observed in Switzerland. This may also be in part to landownership differences in the United States.

Some major takeaways and potential impacts for the College of Agriculture, Life Sciences, and Natural Resources, The University of Wyoming, and the State of Wyoming are listed with each objective at the beginning of our report.

Objective #1

We had a great opportunity to learn in-depth information related to Swiss high alpine forage-based systems. This ranged from systems that move between high and low elevations and others that are at the same location all year. We had the chance to look at different types of pastures and forages that are being grown for animal consumption. We were able to take this information to look at what we are doing in Wyoming and ways that we can potentially improve some of the systems here. An example that can be applied to irrigated meadows in Wyoming is exploring the use of plate measuring tools for forage production. Most of these devices are produced and developed in Europe. The device is all electronic and uploads to your phone to keep track of when you grazed a pasture last, what the production for the pasture is, and it lets you set levels to see how much grass is available for harvest. It could be very beneficial to managers in Wyoming to explore using this new tool for setting up livestock grazing system on irrigated meadows.

Objective #2

It was very interesting to see that most places we stopped to visit have tourism as an active part of their operations. For most operations this involved the tasting and viewing of products such as cheese or yogurt. Producers were interested in telling us about their products before they would show us their pastures. Most of the farms have either a small shop to sell their products and/or they provide samples for people to taste for a fee. This might not work for all producers in Wyoming, but for those that raise and finish their own beef or milk products there is the potential to market to a niche group of tourists to sell their products.

Objective #3

We plan to develop a webinar that explains what we did in Switzerland and how what we learned might be beneficial others. This includes livestock producers, Extension Educators, and other colleagues in the college.

Objective #4

We were able to gain a greater understanding the Swiss “Extension” system. Dr. Reidy interacted with clientele very similar to an Extension Specialist in the UW Extension system. He organized workshops, collaborated with producers on applied research topics, and provided technical assistance. Swiss producers receive subsidies in the form of direct payments from the government. The payments are tied to certain education and production practices. Due to this system most producers engage with “Extension” to obtain an agriculture practitioner’s degree as well as continual education. Farmers also receive financial incentives for participating in applied research and allowing farm visits. The farmers we visited with were eager to share

their knowledge with us and their farming practices. The lessons learned from Extension will also be shared in the webinar listed in Objective #3.

We feel that traveling to Switzerland was very successful and provided us each with a new way to look at the agriculture happening in Wyoming and other parts of the world. Dr. Reidy was able to tour some of Wyoming this past summer with Bridger Feuz. We are hoping that he will be able to return at some point he can learn more about Wyoming's agriculture and we can also continue to learn from Dr. Reidy.

Include:

1. Main results of activities planned in the proposal.
2. Describe any future plans
3. Outline potential impacts to a) the College of Agriculture and Natural Resources, b) the University of Wyoming, and c) the State of Wyoming
4. Photos



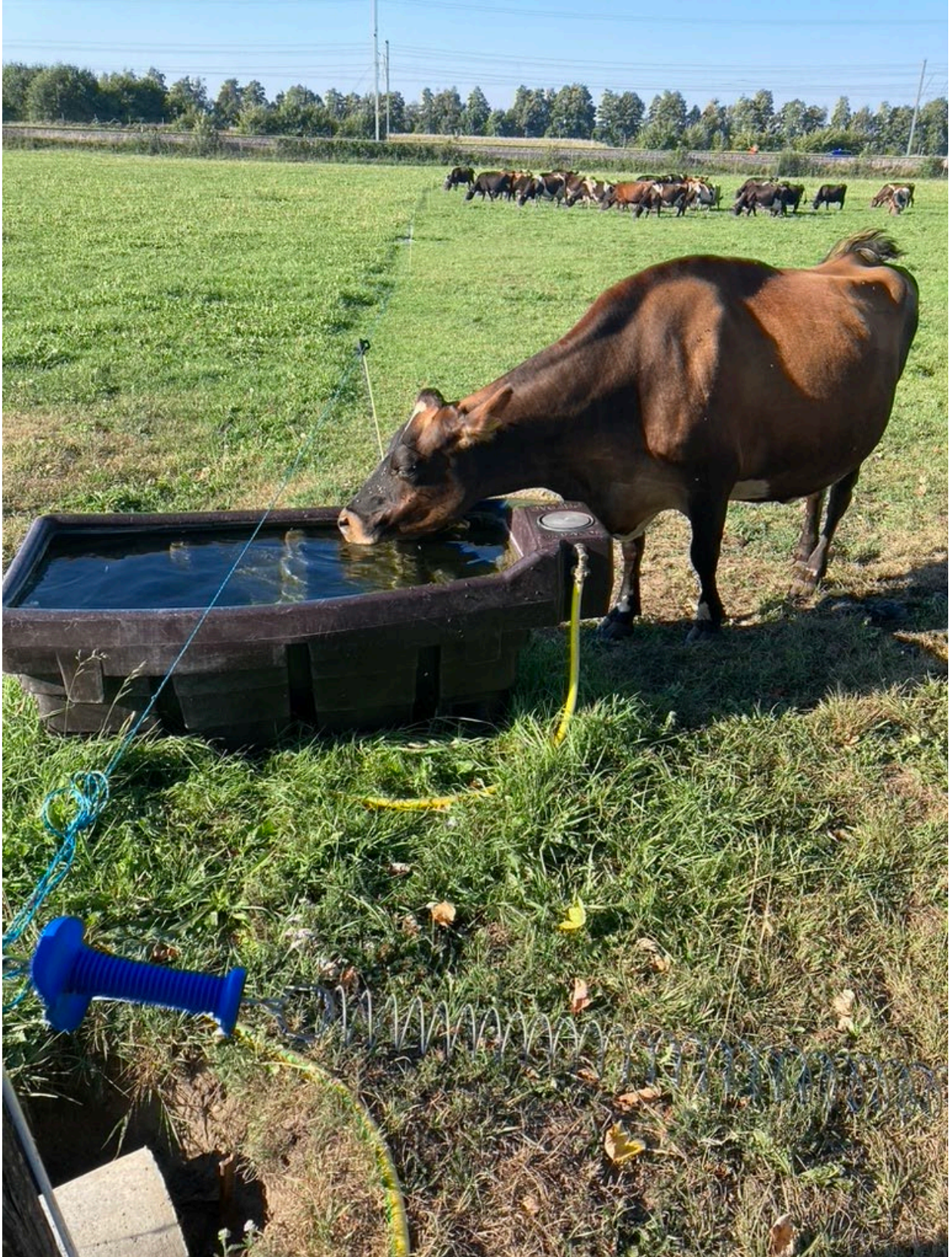
Dairy Cattle are the most common sight at higher elevations in Switzerland. Just like Wyoming, Switzerland is host to wolves which tend to prey heavily on sheep and goats at these higher elevations making it difficult for livestock managers to raise these types of livestock in and near the Alps.



The farm in the far distance is where we learned about the cheese making process and the requirements for cheese to be considered Alps Cheese. The owners of the farm gave us some great insight for how they promote a niche market on their farm. Electric fence and two-strand barbwire fences were used to keep dairy cattle contained on the property. We both agree that we wouldn't trust our Wyoming cattle near the cliff with a two strand barb wire fence that is one meter tall!



Electric fence is the main mechanism for containing livestock throughout much of Switzerland. As can be noticed from the different colors of green for pastures, high intensity and low duration grazing is a common grazing strategy for many high alpine systems. In many parts of the country the permanent tree line for alpine systems has been lowered by 200 meters due to this grazing method.



Just like in Wyoming, some livestock managers are challenging some of the traditional methods for raising livestock and producing milk. This particular family farm is making

yogurt with milk from a New Zealand dairy cattle breed. They are also implementing practices to avoid cutting hay with tractors and other types of equipment. Some of the forages in this pasture were sourced from new Zealand for a potential increase in forage production and nutrition compared to other traditional crops.

QUESTIONS? Contact Joanne Newcomb in the Agricultural Experiment Station office at aes@uwyo.edu or (307) 766-3667.