



In the MARGINS

Department of Agricultural and Applied Economics

A newsletter for alumni and friends of the UW Department of Agricultural and Applied Economics.

AgEcon student's research into Upper Green River Basin water demand earns outstanding thesis honor

By Katie Shockley

A study by a University of Wyoming AgEcon student exploring a proposed water demand management program on the Upper Green River Basin has received the Western Agricultural Economics Association (WAEA) Outstanding Master's Thesis Award

The thesis by master's student Ellen Yeatman entitled *Ranch-level Economic and Ecological Tradeoffs of Water Demand Management in the Upper Green River Basin* examines a program that would try to alleviate the water supply and demand imbalance within the Colorado River Basin.

Continued on page 7.



Stellar Green River graduate helps UW team study vaccine hesitancy

By Steve Miller

This Green River standout economics student may be attending Michigan State University, but he's also helping his home state discern vaccine hesitancy among Wyoming residents.

Gregory Marchal was named MSU's 17th Truman Scholar. He is one of 62 students from 51 U.S. colleges and universities selected as scholars. Marchal is also a research assistant on University of Wyoming agricultural economist Mariah Ehmke's team studying vaccine hesitancy.

Her group in the College of Agriculture and Natural Resources is analyzing the links among behavioral economic measures such as a propensity to cooperate, risk preferences and fairness expectations and parents' intention to vaccinate or the vaccination of their child, she said.

Ehmke said Marchal has been interested in vaccine hesitancy since he debated it at Green River High School. Last

summer as an intern at the Council of Economic Advisers he expressed an interest in getting involved in the research.

"I had too much data and not enough time, so I interviewed him, and he began analyzing the data on parents' risk aversion and immunization hesitancy," said Ehmke, an associate professor in the AgEcon Department.

A brother, Alexander, had been Ehmke's research assistant while an undergraduate at UW. He is now pursuing a Ph.D. at Purdue, and he and Ehmke are also continuing research together.

"Gregory has a ravenous appetite for knowledge and will



Continued on page 7.



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www.uwyo.edu/agecon
www.facebook.com/UWAgEcon

Department Head: Ben Rashford
Editor: Cole Ehmke

Faculty Profile: Jeff Edgens

This semester we are pleased to profile one of our newer editions on the Laramie campus. Jeff Edgens has a busy schedule with teaching AGEC 4700, AGEC 1101 (First Year Seminar, two sections), and new this fall AGEC 1499. We asked him a few questions about himself. ~ *The Editor*

1. What are you working on at the moment?

A new course and new course proposal. The new class this fall is AGEC 1499 - *Agriculture Pathways to Success* which will connect students and alumni on developing a career pathway. This is the first part of what we see as a two part class. Part two is in development.

2. Have you always wanted to be a professional teacher?

Absolutely! From my undergraduate days at a liberal arts college with a major in public policy, I saw splendid professors who sought to motivate and encourage students in all ways. I said, that's what I want to do! After my PhD work though, I worked for a state Farm Bureau managing environmental regulatory issues for several years. That led to university extension work and then into administration. Now after several stops along the way and teaching at the same time I can now focus on what I like to do — work with undergraduates!

3. How did you get into economics? How did you get to UW?

I did some PhD work in economics and then with my interest in



that and regulatory affairs and public policy I understood the need for advocacy and simplifying theoretical economics with applied economics. With some work with special interests and consulting, publishing of dozens of op-eds and radio interviews and state legislative testimony, I saw the impact of applied economics and continued down that path bringing realism and practicality into courses.

I came to Wyoming as the dean of the UW at Casper branch campus where I served for three years before I chose to return to faculty and move to Laramie. One of the best decisions I've ever made.

4. What is the best part of being an economist?

Studying application and theory connections that influence public policy. Institutional economics is my specific interest where the rules, customs and beliefs shape our ideas and under-

standing of the marketplace. Institutions are at the center of AGEC 4700 Range Resource Economics and in the First Year Seminars. Institutional economics allows me to also bring an interdisciplinary approach to economics.

5. What have been some of your favorite projects?

Establishing a water quality trading program on the Kalamazoo river when I was with Michigan Farm Bureau. We structured a trading program between point and nonpoint sources.

Also, writing public policy briefs for decision makers and legislators along with providing testimony before legislative committees many years ago.

6. What has been the most satisfying part of your work?

Working with students and mentoring for future development. Freshmen to seniors is where I've spent most of my time as a teacher. I try to entertain, use my personality, realism, and practicality together with discovery to expand critical thinking and new ideas.

7. What do you love to do other than economics?

Playing one of the nine guitars I own. Enjoy learning new songs in folk and country genres on acoustic. There is not an electric guitar in the collection. Golf when I can, but that is limited. And camping is always a nice deal.

8. What advice would you give to new graduates?

Be flexible, listen to your mentors, always continue to learn formally and informally. The best learning often comes from informal learning - reading, reading and reading again! Reflect on the reading and practice what you learn. Think interdisciplinary. See the connections. Be iconoclastic. Challenge convention. It's the only way we can break or move paradigms and institutions!

9. What issues do you see shaping the agriculture/Wyoming of the future?

Water quality and scarcity are key to the state and agriculture. International trade is something I'd closely watch as governments align to manage cross boundary resource issues. ■



New from RightRisk: **Risk strategies** are often a complex sequence of decisions completed over a period of time with new information collected along the way. A decision tree or decision flow diagram can provide a clear graphical representation of these risky decision problems . . . read about them at RightRisk.org/news



Commencement 2021

Congratulations to this year's Ag Business graduates!



Brandon Altman
Andrew Boint
Baxter Boldon
Austin Bornhoft
Scott Broyles
Austin Burkett
Caitlyn Covington
Alexanna DeWaard
Sarah Dey
Tanner Dill
Erika Eckhardt
Drew Ellis
Henry Ellis
Riley Erickson
Michaela Forty
Hunter Galluzzo
Timothy Gill
Makenna Greenwald
Garrett Hall
Steven Hindman
Brittney Jayo
Jacob Logar
Mikeal Loiland
Dylan Long
Elizabeth Martinez
Jaci McDiffett

Laramie, Wyo.
Sheridan, Wyo.
Buffalo Gap, S. Dakota
Atwood, Colo.
Arlington, Wyo.
Hillsdale, Wyo.
Aromas, Calif.
Elgin, Illin.
Cheyenne, Wyo.
Ault, Colo.
Laramie, Wyo.
Carpenter, Wyo.
Hendersonville, N. Carol.
Ten Sleep, Wyo.
Laramie, Wyo.
Cheyenne, Wyo.
Tekamah, Nebr.
Lingle, Wyo.
Olathe, Colo.
Centennial, Colo.
Morgan, Utah
Douglas, Wyo.
Athena, Oreg.
Cortez, Colo.
Worland, Wyo.
Craig, Colo.

Jack McMurdo
Bryson Mills
Taylor Munson
Hallie Myhre
John Nelson
Courtney Newman
Amy Newman
Wyatt Norman
Vincent Oedekoven
Ty Paisley
Seth Peterson
Joseph Pieper
Wyatt Pollard
Shannon Ragan
Jerraldawn Rector
Timi Reynolds
Sierra Shelit
Saige Skalsky
Shelbie Sperle
Jase Staudt
Matthew Stith
Garrett Uptain
Rhealynn Weeda
Alexis Wivell
Emily Zavorka
Emma Zerbe

Parker, Colo.
Laramie, Wyo.
Sprague River, Oreg.
Steamboat Springs, Colo.
Laramie, Wyo.
Fort Collins, Colo.
Fort Collins, Colo.
Pine Bluffs, Wyo.
Gillette, Wyo.
Wheatland, Wyo.
Minot, N. Dakota
Mitchell, Nebr.
Elizabeth, Colo.
Eagle, Colo.
Agate, Colo.
Casper, Wyo.
Pine Bluffs, Wyo.
Ogallala, Nebr.
Parker, Colo.
Nathrop, Colo.
Laramie, Wyo.
Craig, Colo.
Laramie, Wyo.
Smock, Penn.
Yoder, Wyo.
Lusk, Wyo.



Undergraduate Commencement for the Colleges of Ag and Natural Resources and Engineering, and the School of Energy Resources was May 14, 2021 in the Arena-Auditorium.

Jim Magagna, the longtime executive vice president of the Wyoming Stock Growers Association and an advocate for Wyoming ranchers received the University of Wyoming's highest award, the honorary doctoral degree. ■



AgEcon Scholarship Recipients

We're very proud of our department's scholarship awards from this year. And we're proud of the generosity of those who have provided the funds that make it possible to support the educational aims of our excellent students. Here are the recipients for the 2020—2021 school year for awards that are specific to the AgEcon Department.

Aubrey Cepek	Andrew and Connie Vanvig Scholarship
Clayton Auzqui	Henry Petz Scholarship Fund
Dakota Julian	Carbon Power and Light Co-Ops Class Scholarship
Elizabeth Martinez	Henry Petz Scholarship Fund
Ellinor Trader	Andrew and Connie Vanvig Graduate Fellowship
Hunter Galluzzo	Andrew and Connie Vanvig Scholarship
Hunter Galluzzo	The Richard and Joyce Thorvaldson Clark Scholarship
Jacob Asay	Andrew and Connie Vanvig Graduate Fellowship
Meri Hambaryan	Andrew and Connie Vanvig Graduate Fellowship
Morganne Wilson	W G Kearl Agricultural Economics Scholarship & Agronomy Economics Research
Shannon Ragan	Andrew and Connie Vanvig Scholarship
Shaylee Hancock	W G Kearl Agricultural Economics Scholarship & Agronomy Economics Research
Tevyn Baldwin	Andrew and Connie Vanvig Graduate Fellowship
Victoria Anderson	Andrew and Connie Vanvig Graduate Fellowship

Recent Master's Candidate Thesis Presentations

Jacob Asay

Economic Implications of Integrating Cover Crops into Irrigated Barley/Sugarbeet Rotations in the Bighorn Basin of Wyoming

Tevyn Baldwin

The Stocker Steer Quandary: Stocking Rate, Marketing Date, and Price Slides in Northeastern Colorado

New Publication: The Stocker Steer Quandary: The Price Slide

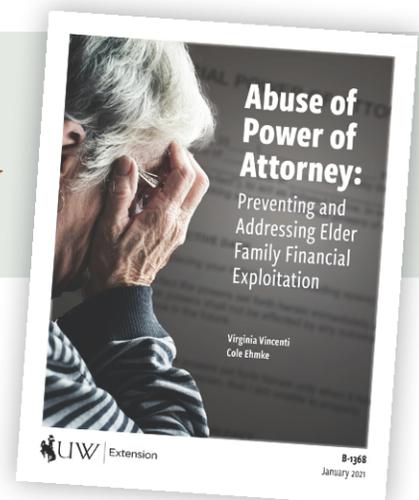
The market price received when yearling stockers are sold as feeder cattle to feedlots is one of the most variable and uncertain factors facing ranching operations. This price is dynamic and heavily influenced by supply and demand at different levels within the beef industry.

This new UW Extension publication can help producers understand how fall feeder cattle prices are affected by weight, feed prices and finished cattle prices, which may impact how they manage livestock in the spring or summer. It can be found at <https://www.wyoextension.org/publications>. 

DOWNLOAD UW Extension's New POWER OF ATTORNEY Bulletin

A financial power of attorney is a potent estate planning tool, but it has the potential to be exploited. *Abuse of Power of Attorney: Preventing and Addressing Elder Family Financial Exploitation* provides best practices on setting up a document to avoid abuse, and guidance for responding when it occurs.

Request a free hard copy at (307) 766-3782 or cehmke@uwyo.edu.



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Book Corner

The Psychology of Money: Timeless Lessons on Wealth, Greed, and Happiness

Reviewed by Tom Foulke

I had been looking for a textbook for *Applied Equity Investing* (AGEC 3420) for about six years with no luck. Most books on money, that I have seen, offer some sort of scheme that will enable you to, dare I say, 'get rich quick.' However, as economist John Kenneth Galbraith said, "There is nothing reliable to be learned about making money. If there were, the study would be intense and everyone with a positive IQ would be rich." Well, he must be right, because the study is intense, but we are not all rich. That said, the more that I have been teaching about investing, the more I have been looking for a way to talk about the concepts behind making money and how people approach money. It is rather important really because it all comes down to the questions of how and why we save and invest in the first place.

Last summer while perusing the *Wall Street Journal*, I came across a book review by Jason Zweig, the longtime personal finance columnist. I gave it a glance and was immediately hooked. *The Psychology of Money* seemed to offer what I had been looking for. I pre-ordered a copy right then and there. I was not disappointed.

There is no investing method in this book. There are no stock tips, no analysis methodology, no formulas. It is all about our complicated individual relationships with money; our perceptions of value of this uniquely human store of wealth. How our brains deal with gain and loss, and send us cues and miscues that we need to learn to read, and sometimes overcome in order to accumulate and hang on to that wealth. And maybe more importantly, how to be happy with our money decisions in our lives.

The author uses a series of narratives to illustrate his point. There is the story of Ronald James Read, the unassuming custodian from Vermont who passed away at 92 and left an astounding \$8 million legacy to philanthropy, all by just being a wise and patient investor. Bill Gates and Warren Buffet make appearances too, but their stories are not just about wisdom, but the role that chance can play in life as well.

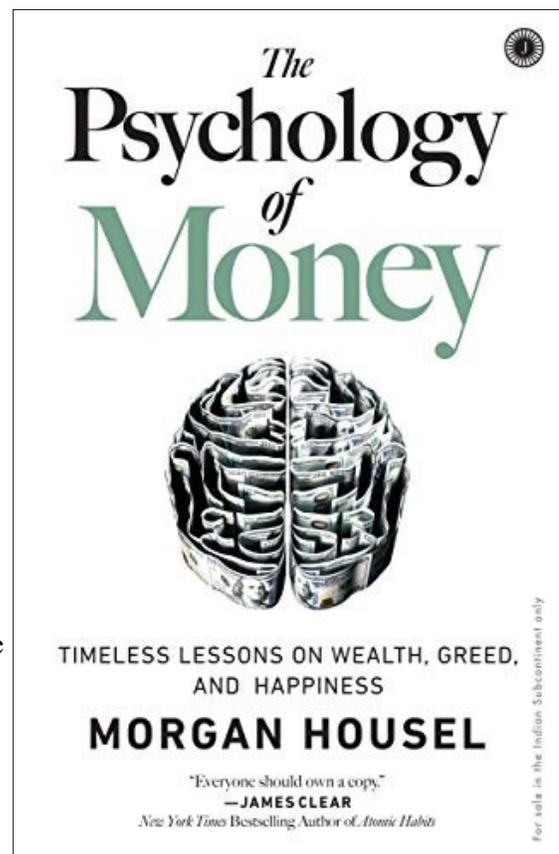
Two things that I really liked about the book are the themes of risk and risk tolerance, and the concepts of time and value that flow through the book. Because these are the essentials of investing decisions. This book explains them well in a way that resonates with students.

The book is written in a more conversational journalistic style, which makes it easy to read. The chapters are short and you do not need to read them in sequence. You can put it down and pick it up without losing the theme.

The book was required reading for AGEC 3420 this spring. We had three days of book discussions spaced throughout the semester in which I tried to reinforce the concepts in the book and tie them into what we were talking about in class, and seeing in the news and markets. Hopefully, students will apply these concepts early in their working lives so that time and savings will work their magic for their later years.

Recommended for your library by Tom Foulke. ■

Author: Morgan Housel
Publisher: Harriman House
(2020)



Vanvig Fellowship Profiles

The Vanvig Fellowship is the premier award for graduate students in Agricultural and Applied Economics. The fellowship is made possible by a generous endowment from former Department Head Andy Vanvig and his wife Connie. It is given annually to recognize an outstanding graduate student who excels in the classroom, as a researcher, and as a University citizen.

The graduate committee, with input from the faculty, selects the Vanvig Fellow each year – and every year it is a difficult decision because we have so many exceptional and hard-working graduate students. It was Andy and Connie’s vision that this fellowship provide a significant financial award to recognize and support its annual winner, which in normal years limits us to one fellow. But this is anything but a *normal* year. The COVID-19 pandemic has forced us to re-imagine everything we do, and has created unique challenges for graduate students. From simply making interactions with advisors awkward, to research travel restrictions, graduate student research has never been harder. Through it all, our students have, and continue to, overcome every challenge. They have all made phenomenal progress on their research and coursework, and have worked together to stay connected and to welcome new students. To honor their amazing work ethic, dedication, and positive attitudes, the graduate committee has decided to award a ‘collective’ Vanvig Fellow to the entire 2021 MS class! Each will be awarded a \$1,000 scholarship.

~ Ben Rashford, Department Head

Tori Anderson’s thesis research project uses a multi-attribute utility theory approach to simulate a Pareto-optimal negotiated settlement among key stakeholders regarding future wolf management practices in Colorado. Tori has taken the lead in designing and testing the survey instrument that will be used to collect utility values related to various management alternatives. This involved interviewing wildlife managers, legal experts, agricultural producers, wildlife advocates and others to understand management approaches that would likely be deliberated by a diverse set of stakeholders who would be affected by, or could affect wolf management practices in Colorado.



Jacob Asay is evaluating the economic impacts of various cover crop options for irrigated systems in the Big Horn Basin. He has overcome significant data challenges (failed field stands and complicating hailstorms) to build a model and tell a compelling story about the potential for cover crops in the region. Jacob has already published enterprise budgets for the Big Horn Basin through UW Extension as part of this project.



Meri Hambaryan’s thesis research is focused on examining consumer preferences for honey and other sweeteners in the United States. One of the main contributions of her study is the simultaneous estimation and investigation of sweetener supply and demand, in contrast to the previous literature, which largely ignores the supply shocks brought by diseases, abrupt weather changes and natural disasters that constitute the most important sources of price variability in agriculture. Meri’s research can help both honey consumers and producers in the country make better-informed decisions while providing the policymakers with the informational base for formulating more accurate and effective food and trade policies.



Elli Trader is investigating the relationship between climate and food fraud in French wine exports for her thesis research. She has used her undergraduate experience studying French agriculture to navigate French academic and government databases to obtain French grape and wine production and climate data. She will soon be using her predictions to detect possible cases of fraud in the export market to China. Elli is to be commended for her flexibility in adapting to travel restrictions imposed by the COVID-19 pandemic and for her motivation to learn a great deal of wine economics on her own as a result of these restrictions.



Tevyn Baldwin is working with an interdisciplinary (and inter-institutional) team to evaluate the impact of various grazing management strategies on numerous objectives, including forage specie composition over time, bird habitat, profitability, and social learning. Understanding the trade-off between weight gain and animal (and ultimately herd) value in a given year will help stakeholders understand the financial implications of various stocking rates as one cost of working towards (or not) the other objectives. Tevyn is also involved in evaluating the economic implications of various stocking rates and marketing dates for steers using a Monte Carlo simulation, and is working to update a cattle price slide forecasting tool to help producers (again yearling operators) better understand the impacts of both fed animal and grain prices on the cattle price slide (the phenomenon that cattle prices per-unit-weight decrease as weight increases).



“The Upper Basin states are working to figure out what are the best ways to meet their obligations to the Colorado River Compact to the Lower Basin states to not deplete the river,” said Kristi Hansen, associate professor in the AgEcon Department and Yeatman’s adviser. “Basically, Ellen is looking at a new kind of conservation program that policy makers are considering for the region.”

Many ranchers and irrigators in southwestern Wyoming use flood irrigation, which causes concern for how a water conservation program like this may have different economic and ecological tradeoffs.

Yeatman spent time talking with the producers of to understand the economic and ecological tradeoffs in ranchers would face if they were to consider voluntarily and temporarily being paid to use less water in direct response to the drought occurring across the Colorado River Basin.

“There are not only economic costs and benefits of being paid to use less water, but there are also really interesting social and ecological tradeoffs,” said Yeatman.

The same year Yeatman was conducting her research, the Upper Colorado Basin states signed into law the Colorado River Basin Drought Contingency Plan, which made it official that states had to find a way to deal with drought and constraints facing water resources.

“As she was learning about these issues, the policy landscape was changing as these policy makers were working to figure things out themselves,” said Hansen.

Yeatman explored three study areas in the Upper Green River Basin: the Boulder, Fontenelle and Henry’s Fork River regions. All three face just slightly different elevations, growing season day lengths and different return flow and wetland concerns, said Yeatman.

“As a sub-region of the Upper Colorado River Basin, we would expect these study areas within this sub-region to respond similarly to a demand management program,” said Yeatman. “The ranches are all cow-calf operations growing grass hay and/or alfalfa with surface water irrigation sys-

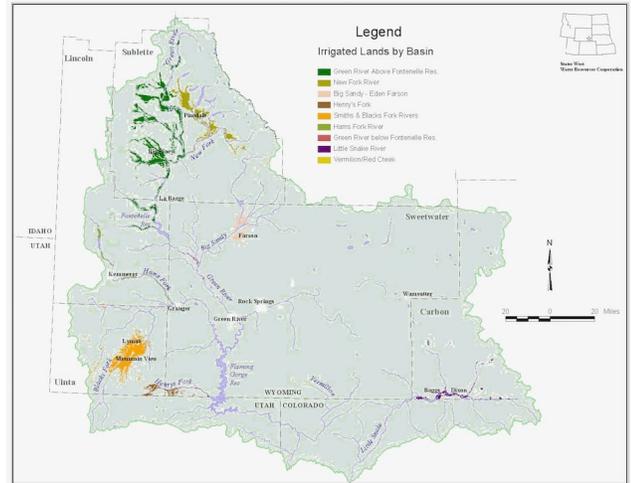
tems facing similar hydrological patterns, but we found just between these three study areas there is huge variability in willingness to participate and in ecological impacts of using less water.”

Yeatman developed a linear optimization model that considers both public (wetlands and return flows) and private (ranch-level net margins) factors. This method is commonly used by economists to estimate the economic value of water in different uses.

“The field-level opportunity cost for demand management varied from \$10 per acre-foot to \$170 per acre-foot of consumptive water use savings between and within these areas,” said Yeatman.

“I was really impressed with how fully she embraced the task of learning about Colorado River Basin policies and issues because it is really quite complicated,” said Hansen. “Lawyers and policy makers in the region are still working to figure out how to envision a path forward for how to govern water within the constraints of the Colorado River Compact during a time of increased water scarcity.”

Yeatman, of Little Rock, Ark., completed her undergraduate degree in environmental science and chemistry at Washington and Lee University in Lexington, Va. She graduated from the University of Wyoming with a master’s degree in agricultural and applied economics last August. She is working remotely as a water resource specialist for American Farmland Trust in Kelly, Wyo. ■



go above and beyond to meet work expectations,” said Ehmke. “Both he and Alex have worked 12-hour days in Hazmat suits in labs in the Green River mines,” she said. “Asking them to spend a little extra time running an econometric model seems to be a small ask compared to the work they did there. Gregory brings energy and enthusiasm to his work. He is also emotionally intelligent, humble, and bright.”

Marchal used the project in his econometrics class at MSU and as his senior thesis. He has received a fellowship from MSU to continue working with Ehmke. She hopes to expand the work to encompass COVID-19 vaccine hesitancy.

Marchal is attending MSU as a STARR scholar. He is an Honors College junior majoring in economics with a minor in social science quantitative data analytics in the College of Social Science and mathematics from the College of Natural Sciences. Marchal said he also has a passion for creating equitable monetary policy and will be interning at the Federal Reserve Board of Governors this summer.

STARR Charitable Foundation Scholarships provide a full-ride scholarship opportunity to high school seniors in Wyoming and in the Upper Peninsula of Michigan to attend UW or Michigan State University. Gregory’s twin brother, Patrick, is also a STARR scholar at MSU. ■



In the Margins

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New Grant Projects

- **Anders Van Sandt, Mariah Ehmke** and others were selected for a UW Grand Challenges grant for their proposal *Building Access to Rural Health Care in Wyoming*.
- **Mariah Ehmke** and colleagues across campus were selected for a UW Grand Challenges grant for their IMPACT program *Innovative Methods to Develop Adaptive Capacity through Transdisciplinarity*.
- **John Ritten** received a grant from the National Cattleman's Beef Association which will fund thesis research.
- **Mariah Ehmke** received a Hatch Multi-State competitive grant for *Economic Analysis of Food Fraud Incentives in US and International Markets*.
- **Kristi Hansen, Mariah Ehmke and Anders Van Sandt** received a grant from the Provost Strategic Investment Fund for *Cultivating Community Preparedness: Assessing Drought-Risk Perception in Wyoming Communities*.
- **Cole Ehmke** received a Hatch Multi-State competitive grant for *Elder Financial Exploitation*.
- **Amy Nagler and Ben Rashford** received a non-competitive grant from the Wyoming Wildlife Federation for *RD2H Migration Corridor Landowner Benefits*.

Staff Recognition

- **Jeff Edgens** was selected for a 2021 PIE award (Promoting Intellectual Engagement in the first year), which are nominated directly by students taking first-year seminar courses.
- **Kristi Hansen** and others' research and outreach on the multistate working group W3190 Management and Policy Challenges in a Water-Scarce World is featured in the Western Region impact statement for the Western Association of Agricultural Experiment Station Directors.

DO YOU KNOW SOMEONE WHO IS STRUGGLING? Helpful Things to Say to Someone Who May Be Struggling

NATIONAL SUICIDE PREVENTION LIFELINE
www.suicidepreventionlifeline.org

☎ 1-800-273-8255

"What are you feeling?"

"I care and am here to listen."

"How have you dealt with things in the past?"

"How long have you been feeling like this?"

"Have you been thinking about suicide?"

