



Department of Biology Masters Distance Learning Program

MASTERS DISTANCE MONITOR

May 2024

Issue 48

WELCOME

New Online Masters Students for Summer 2024:

Katherine Ackerman, NE; Tammy Beckstrom, NE; Sage Cayman, CA; Jamie Cota, SD; Laura Eagle, CT; Shane Foglesong, OH; Jaclyn Friel, IL; Hannah Gillet, NE; Jacob Gomez, TX; Chelsea Habif, MA; Koleen Haldeman, NE; Nicole Hebert, NE; Jordan Heckel, KS; Ashley Hendrix, VA; Jessica Hughes, IA; Krystal Johnson, WA; Patricia Kamanda, MI; Mary Leusink, CO; Kelsey Martin, MI; Angela Martire, FL; Leonard Parker, NC; Mia Patikas, IN; Jenna Peterson, SD; Jason Potter, IL; Elizabeth Prauner, IL; Kate Stewart, MO; Ted Stocking, NE; Melissa Thomas, IA; Derek Thompson, MN; Jennifer Williams, CA

NEWSFEED

Dr. Julie Shaffer, Professor of Biology, was selected as the next Senior Vice Chancellor for Academic Affairs. She has been serving as Interim SVCAA since August 2023. Below is an excerpt from an article written in University of Nebraska News; for full article click on the following link:

unknews.unk.edu/2024/03/25/julie-shaffer-promoted-to-permanent-senior-vice-chancellor-for-academic-affairs-position/. Congratulations Dr. Shaffer!

Julie Shaffer promoted to permanent senior vice chancellor for academic affairs position

March 25, 2024

Tyler Ellyson



KEARNEY – Following a national search, the University of Nebraska at Kearney has selected Julie Shaffer as its next senior vice chancellor for academic affairs.

Shaffer has served as interim senior vice chancellor for academic affairs since August 2023. Her appointment to the permanent position is pending approval from the NU System president and Board of Regents.

“Julie has shown her commitment to UNK through a variety of activities, from mentoring student researchers to serving as interim senior vice chancellor during an important time. I’m very pleased that she has accepted this position, and I know UNK is in good hands,” Chancellor Doug Kristensen said.

Shaffer joined the UNK Department of Biology in 1999 and was promoted to associate professor in 2004 and professor in 2010. She served as the department’s graduate program chair for seven years and online director for one year before becoming the department chair in 2017.

Shaffer has taught undergraduate and graduate courses – online and in person – while mentoring countless student researchers. With interests in microbial ecology and tickborne pathogens, she’s presented at numerous conferences and had her work published in a variety of academic journals. Her research projects have received more than \$6 million in grant funding.

She’s also served on several campus committees and academic program review teams and is a current fellow for the National Strategic Research Institute at the University of Nebraska.

“I’m honored to be the next SVCAA of UNK,” Shaffer said. “I look forward to working with the deans, directors and faculty to strengthen the academic programs and support the UNK mission.”

Among her many awards and honors, Shaffer received the Pratt-Heins Award for Teaching in 2010 and Leland Holdt/Security Mutual Life Distinguished Faculty Award – the university’s most prestigious faculty honor – in 2014. She was instrumental in revising the curriculum for her department’s undergraduate and graduate programs while creating several courses in her area of expertise.

CONGRATULATIONS

May 2024 Graduates:

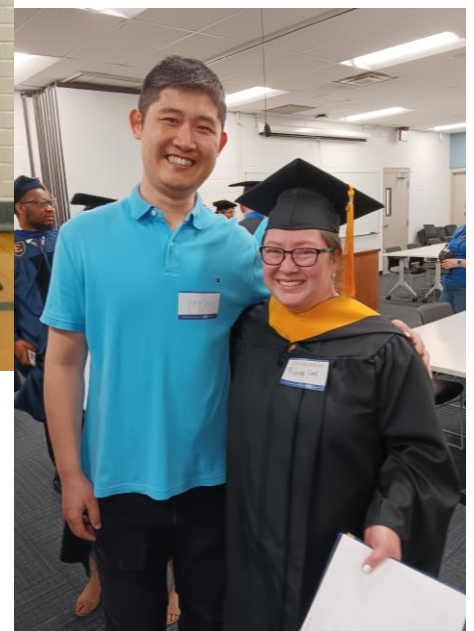
Abby Brehm, Colleen Chipman, Matthew Clarke, Renee Cool, Justin Dunn, Jennifer Gallagher, Shana Gallant, Dylan Gravenhof (THESIS), Jessica Harrison, Taylor Hastings, Mollie Hutton, Jason Katz, Jamie Kavan, Mary Kluck, Christin Macapagal, Makayla McDaniel, Laurea Patterson, Ariele Peters, Dan Podjenski, Sunanda Rajput (THESIS), Jamee Smith, Katie Steecker, Quianna Waltmann, Christina Wilhoit, Jenna Williams, Logan Zebro (THESIS)

Fourteen graduates were able to attend the commencement ceremony on May 17th at 10:00 am in the Health and Sports Center. UNK Online hosted a meet and greet for graduates immediately following ceremony in the HPER gym. Online graduates, along with their guests, and biology faculty were able to stop by for some refreshments and meet each other in person.



Pictured left, back row from left to right: Dr. Letty Reichart, Dr. Dawn Simon, Dr. Nick Hobbs, Dr. Mary Harner, Dr. Yipeng Sui, Dr. Jacob Cooper; front row from left to right: Abby Brehm, Sunanda Rajput, Renee Cool, and Dr. Keith Geluso

Pictured right: Dr. Yipeng Sui and Renee Cool





Pictured above: Katie Steecker and Sunanda Rajput

Pictured below: Sunanda Rajput and Dr. Melissa Wuellner



Pictured below: Dr. Austin Nuxoll, Christina Wilhoit, and Dr. Yipeng Sui



Pictured below: Christina Wilhoit and Jenna Williams



Pictured left: Dr. Nick Hobbs, Sunanda Rajput and Dr. Yipeng Sui



Pictured left: Dr. Letty Reichart, Ariele Peters, Dr. Nick Hobbs, and Dr. Yipeng Sui

Pictured below: Dr. Dawn Simon and Abby Brehm



Pictured left: Dr. Austin Nuxoll, Christina Wilhoit, Dr. Yipeng Sui, and Dr. Joe Dolence

Grants, Meetings, Publications

Meetings

- Bajelan, J. and **M. Harner**. February 2024. An informal science learning experience connecting youth to Nebraska's cool critters. Nebraska Environmental Education Conference. Ponca State Park, Ponca, Nebraska. Oral Presentation.
- Bajelan, J. and **M. Harner**. February 2024. Communicating science through *Cool Critters*: An informal learning camp for youth. American Association for the Advancement of Science Annual Meeting. Denver, Colorado. Poster Presentation.
- Dunbar, O., **L. Zebro, M. Wuellner, and K. Koupal**. January 2024. Alewife population structure and dynamics in Lake McConaughy, Nebraska. Midwest Fish and Wildlife Conference. Sioux Falls, South Dakota. Oral Presentation.
- Dunbar, O., **L. Zebro, M. Wuellner, and K. Koupal**. February 2024. Alewife population structure and dynamics in Lake McConaughy, Nebraska. Nebraska Chapter of the American Fisheries Society Annual Meeting. Aurora, Nebraska. Poster Presentation.
- Folk, G. and **M. Harner**. February 2024. Connecting biology concepts to a local context in central Nebraska. Nebraska Environmental Education Conference. Ponca State Park, Ponca, Nebraska. Oral Presentation.
- Keiler-Klein, A., M. Wuellner, K. Koupal**, and J. Hodge. January 2024. Comparison of sport and nuisance fish communities by gear type in Lake Ogallala, Nebraska. Midwest Fish and Wildlife Conference. Sioux Falls, South Dakota. Oral Presentation.
- Keiler-Klein, A., M. Wuellner, K. Koupal**, and J. Hodge. February 2024. Gear comparison for nuisance and invasive species in Lake Ogallala. Nebraska Chapter of the American Fisheries Society Annual Meeting. Aurora, Nebraska. Oral Presentation.
- Keiler-Klein, A., M. Wuellner, K. Koupal**, and J. Hodge. March 2024. Gear comparison for nuisance and invasive species in Lake Ogallala. World Fisheries Congress. Seattle, Washington. Poster Presentation.
- Kreitman, J., **M. R. Wuellner, and K. D. Koupal**. February 2024. Comparisons of periphyton biomass and macroinvertebrate communities on three fish habitat materials. Nebraska Chapter of the American Fisheries Society Annual Meeting. Aurora, Nebraska. Poster Presentation.
- Kosmicki, D.V., M.J. Smith, C. Kruse, and **K. Geluso**. October 2023. Great-horned owl diet at a roost of Mexican Free-tailed Bats in Oklahoma. Annual Meeting of the Central Plains Society of Mammalogists. Omaha, Nebraska. Poster Presentation.
- Mittman, N.D., **K. Geluso, M.J. Harner**, and C. Kruse. February 2024. Vertebrate use of Muskrat (*Ondatra zibethicus*) structures in the Nebraska Sandhills. Annual Meeting of the Nebraska Chapter of The Wildlife Society. Kearney, Nebraska. Oral Presentation.
- Paysen, J.W., M.J. Smith, C. Kruse, and **K. Geluso**. November 2023. Herpetological natural history notes from southern Kansas: engaging undergraduates in research. Annual Meeting of the Kansas Herpetological Society. Lawrence, Kansas. Poster Presentation.
- Smith, M.J., J.W. Paysen, C. Kruse, and **K. Geluso**. November 2023. Fire-induced mortalities of herpetofauna and other vertebrates in a grassland of northern Oklahoma. Annual Meeting of the Kansas Herpetological Society. Lawrence, Kansas. Poster Presentation.

- Smith, M.J., J.W. Paysen, C. Kruse, and **K. Geluso**. November 2023. Roost sites of Eastern Red Bats and Evening Bats in the Great Plains at the western edge of their distribution. Annual Meeting of the Wildlife Society. Louisville, Kentucky. Poster Presentation.
- Smith, M.J., J.W. Paysen, C. Kruse, and **K. Geluso**. February 2024. Mortalities of grassland vertebrates in warm-season prescribed fires. Annual Meeting of the Nebraska Chapter of the Wildlife Society. Kearney, Nebraska. Oral Presentation.
- Sutton, B. and **B.C. Peterson**. February 2024. Non-traditional Antler Metrics to Evaluate Fluctuating Asymmetry in White-tailed Deer. Annual Meeting of the Nebraska Chapter of the Wildlife Society. Kearney, Nebraska. Oral Presentation.
- Wuellner, M., A. Keiler-Klein, K. Koupal**, and J. Hodge. January 2024. Nuisance and invasive fish controls in a tailwater reservoir fishery: The challenge of Lake Ogallala. Southern Division of the American Fisheries Society Annual Meeting. Chattanooga, Tennessee. Oral Presentation.
- Zebro, L., M. Wuellner, and K. Koupal**. January 2024. Potential consequences to sportfish recruitment from an introduced planktivore in a large Midwest reservoir. Midwest Fish and Wildlife Conference. Sioux Falls, South Dakota. Oral Presentation.
- Zebro, L., M. R. Wuellner, and K. D. Koupal**. February 2024. Fry-day night lights: Setting up the battle between Walleye stocking contributions and Alewife Food Habits in Lake McConaughy. Nebraska Chapter of the American Fisheries Society Annual Meeting. Aurora, Nebraska. Oral Presentation.
- Zebro, L., M. R. Wuellner, and K. D. Koupal**. March 2024. Alewife: Where are they and who are they eating?. World Fisheries Congress. Seattle, Washington. Poster Presentation.

Publications

- Bajelan, J.L., and **K. Geluso**. 2023. Westward expansion of the Evening Bat (*Nycticeius humeralis*) into Dawson and Lincoln counties of central Nebraska. *Transactions of the Nebraska Academy of Sciences*. 43:1-4.
- Cooper, D.A. and K. Geluso**. 2023. *Tyto alba* (Barn Owl) food habits in metropolitan Phoenix, Arizona: A shift in diet and behavior. *Urban Naturalist*. 10(70):1-9.
- Cooper, J.C.** 2024. Ecological niche divergence or ecological niche partitioning in a widespread Neotropical bird lineage. *PeerJ*. 12:e17345 <https://doi.org/10.7717/peerj.17345>
- Dean, G.H., N. Ivalu Cacho, A. Zuluaga, and **G.J. Pec**. 2024. Resilient botany: Innovation in the face of limited mobility and resources. *Applications in Plant Sciences*. e11577.
- Gattoni, K., E.M.S. Gendron, J.P. McQueen, K. Powers, T.O. Powers, **M.J. Harner**, and D.L. Porazinska. 2024. Effects of drought-induced stress on nematode communities in aquatic and terrestrial habitats of the Nebraska Sandhills. *Frontiers in Ecology and Evolution*. 12:1305930. <https://doi.org/10.3389/fevo.2024.1305930>
- Geluso, K.** 2023. Mexican gartersnakes (*Thamnophis eques*) along the Gila River in southwestern New Mexico. *Western North American Naturalist*. 83:296-299.
- Geluso, K.**, and J.A. White. 2024. Kangaroo rats' habits enhance plant diversity. In "The Nebraska Sandhills" (Eds. M. Norby, J. Diamond, A. Sutherlen, S.C. Fritz, D.A. Norby, and M. Forsberg). University of Nebraska Press, Lincoln, NE.
- Gravenhof, D. A., M. R. Wuellner**, E. A. Renner, and M. J. Fincel. 2024. Estimating predation rates of stocked juvenile Chinook Salmon *Oncorhynchus tshawytscha* using novel acoustic predation transmitters. *North American Journal of Fisheries Management*. 44:438 – 448.
- Koupal, K. D.**, M. Miller, and **M. R. Wuellner**. 2024. Examination of Muskellunge (*Esox masquinongy*) overwinter survival and growth in an earthen extensive culture pond. *North American Journal of Aquaculture*. 86:55 – 60. <https://doi.org/10.1002/naaq.10311>

Mittman, N.D., **K. Geluso**, C. Kruse, and **M.J. Harner**. 2023. Vertebrate use of muskrat (*Ondatra zibethicus*) structures in the Nebraska Sandhills. *Western North American Naturalist*. 83:462-471.

Paysen, J.W., C. Kruse, and **K. Geluso**. 2023. Foraging behaviors of watersnakes (*Nerodia*) and gartersnakes (*Thamnophis*) at a drying pond in southern Kansas. *The Prairie Naturalist*. 55:143-151.

Continue to send us updates on any meetings, publications, grants, or awards that you have been involved with. Please email details to msbiology@unk.edu.

Director's Desk from Dr. Austin Nuxoll

Greetings!

I hope the spring semester went well and everyone is enjoying the start of summer! As we get ready to start the summer sessions, we have some exciting news to share. Dr. Julie Shaffer has been announced as the new Senior Vice Chancellor of Academic Affairs. Dr. Shaffer joined the UNK Biology Department in 1999 and has been heavily involved in the online program for the past 20 years, serving as Director of the Online MS Biology program and teaching numerous courses during that time. The Biology Department will welcome Dr. Letty Reichart and Dr. Surabhi Chandra as co-chairs beginning June 1st. Dr. Reichart joined the UNK Biology Department in 2009 and has previously served as Director of the Online MS Biology program and has provided wildlife courses to our distance students. Dr. Chandra joined the UNK Biology Department in 2013 and has taught a variety of health science courses for our online program.

We will have a new faculty member joining our department in the fall so be on the lookout for offerings from Dr. Haiwei Lu in future semesters. Dr. Haiwei Lu has a broad background ranging from plant related courses and biotechnology to anatomy and physiology. We will highlight Dr. Haiwei Lu in the August newsletter.

This fall, our program will be conducting an Academic Progress Rate (APR) to evaluate the strengths and where we can improve as a department. We will be sending a brief survey out in the coming weeks, so be on the lookout for that email. We would greatly appreciate it if you could help provide us with data on various aspects of our program so we are better able to evaluate it.

Lastly, I want to remind everyone that if a class is full, you can email msbiology@unk.edu or me, at nuxollas@unk.edu to be placed on a waitlist. As classes get underway, do not hesitate to contact me if you have any questions or concerns. I hope everyone has a great summer!

Dr. Nuxoll

Faculty News



Dr. Austin Nuxoll, Associate Professor of Biology, was selected as a National Strategic Research Institute (NSRI) Fellow. The NSRI Fellows program was launched back in May 2021 and includes faculty from across the University of Nebraska System. He, along with four other UNK faculty, were highlighted in the University of Nebraska News; click on the following link to view the full article:

<https://unknews.unk.edu/2024/02/28/five-more-unk-faculty-members-named-national-strategic-research-institute-fellows/>

(pictured left)



Dr. Greg Pec, Associate Professor of Biology, was nominated and will serve as a member of the K-12 Committee of the Soil Science Society of America beginning May 1, 2024 through December 31, 2026.

(pictured right)



Dr. Melissa Wuellner, Associate Professor of Biology, was awarded the Meritorious Service Award from the North Central Division of the American Fisheries Society. (pictured left)

Student News

Lindsay Fugleberg (May 2022 graduate) started a new job at the University of North Dakota as a Teaching Assistant Professor in the Forensic Science program in August 2023. She and her husband, Casey, also welcomed their first child, Ginnie, on June 10th. Ginnie was born 2 months early but is doing amazing! (pictures on next page)



Kim Gonzalez (May 2017 graduate) successfully completed her PhD in Leadership in Education from the University of Massachusetts Lowell.

Katie Hamilton (May 2021 graduate) earned her Project Management Professional certificate in March and was promoted to Chief of Staff – Office of the Provost at Joyce University.

Michelle Hayes (May 2015 graduate) was recently named the Program Director at Northwest-Shoals Community College for their Medical Laboratory Technician program.



Hannah Lenning (current thesis student), Alexandria Keiler-Klein (current thesis student), and Logan Zebro (May 2024 thesis graduate) were named as finalists for the Janice Lee Fenske Memorial Award (Fisheries) at the Midwest Fish and Wildlife Conference in January 2024. (pictured left)

Sunanda Rajput (May 2024 thesis graduate) received first place for both Graduate Writing and Graduate Poster Presentation at UNK Graduate Student Research Day held on April 18th. (pictured right)



Shanna Reed (May 2022 graduate) has begun the Texas Master Beekeeper Program. She achieved Apprentice Beekeeper in November 2023 and is working on the requirements to become an Advanced Beekeeper. Shana maintains her Apiary west of Fort Worth, Texas.

Aubrey Rodriguez (current online student) will be offering free college level Biology courses at Franklin Heights High School in Columbus, Ohio. Since it is a Title I urban school, this fall will be the first time these courses have been offered to these high schoolers.

Louis Sanchez (August 2023 graduate) has been accepted and will be attending the University of Texas Dallas PhD Biology program in fall 2024.

Jeff Shaw (May 2015 thesis graduate) returned to UNK on April 26th to give a presentation at UNK's Doug Lund DNA Day entitled "From INBRE to Industry: How Undergraduate Research at UNK Launched a Scientific Career". After graduating with his Masters at UNK, he attended Creighton University where he earned his doctorate in microbiology and immunology, and then went on to postdoctoral research at Vanderbilt University. He currently works at Roche Diagnostics as the discovery business manager. <https://unknews.unk.edu/2024/04/21/unk-alum-jeff-shaw-to-share-journey-from-student-researcher-to-biotech-leader/>.

Nicole Shives (December 2016 graduate) graduated this spring with a doctorate in Healthcare Education and Leadership from Clarkson College. On April 22nd she successfully defended her dissertation entitled, The Relationship of Positive Psychological Capital on the Academic Performance in Undergraduate Students at a Four-Year Healthcare College.

Jordan Valla (December 2020 graduate) was promoted to Assistant Professor beginning this fall at Iowa Western Community College.

Ashley Yount (May 2022 graduate) was recently accepted to Indiana University Melvin and Bren Simon Comprehensive Cancer Center – Educational Pathway for Cancer Research. This program is for teachers and provides in-person laboratory research experience and curriculum development opportunities for teaching biology and cancer. It will span four weeks over two summers. She will be partnered with a faculty member focusing on breast cancer research.

Logan Zebro (May 2024 thesis graduate) received the Best Student Presentation Award at the Nebraska Chapter of the American Fisheries Society Annual Meeting in Aurora, Nebraska in February.

Please let us know what is going on in your lives; email us your news at msbiology@unk.edu.

Office Space

Still looking to register for a class this summer? The following courses are being offered during the 2nd and 3rd summer session and have a few spots left:

June 3 – July 26 session:

BIOL 830P – Six Global Mass Extinctions (3 hrs)

BIOL 842P – Wildlife and Fisheries Laws and Policies (3 hrs)

BIOL 858 – Physiology of Stress (3 hrs)

June 17 – August 9 session:

BIOL 830P – Contemporary Issues in Health (3 hrs)

BIOL 863 – Biological Perspectives (3 hrs)

BIOL 881-03 – Current Issues (1 hr)

Students can register for open classes on MyBlue up until the first day of the class.

Students planning to graduate this August 2024 must apply for graduation on MyBlue. Even if you do not plan to attend ceremony you must apply in order to receive your degree. The deadline to apply for summer graduation is June 15th. There is a \$25 application fee which can be paid on-line during the application process. Commencement ceremony will take place at 10:00 am on August 9th in the Health and Sports Center. Please consider making the trip to Kearney to walk in graduation and if you do, please let the Biology Department know.

Reminder: If you haven't registered yet for Fall 2024 classes, we encourage you to do so ASAP. Classes fill-up quickly so if there is a course you really want/need to take, you should register now. Fall 2024 classes begin August 26th.

Remember, if a class you are interested in taking is full, contact Brian or Robyn at msbiology@unk.edu to be put on a waitlist. Should a spot become available you would then be contacted via your loper email account.

Field Study Opportunity

In Fall 2024 we will be offering a Regional Field Study (BIOL 856P) course to Baja California Sur (BCS) in Mexico, for 2 credits from October 14-Nov 1. Below is some additional information about the course. The trip is from October 19-27 (fall break) and travel arrangements should be coordinated in advance with the instructor, Dr. Bryan Drew.

If you are looking to register for the course, it is listed as “Off Campus”, instead of “Web Based”. Enrollment is by permission of instructor only; email Dr. Drew at drewbt@unk.edu for permission or with questions. Preference will be given to students who have not previously attended an 856P international course.

Trip Dates: October 19-27 (fall break) 2024

Course Description (2 units):

This course is intended to provide Biology undergraduate (and online graduate students) with a unique real-world learning experience in a region that they would probably not otherwise be exposed to. Students will learn about ecology, plant taxonomy, entomology, geology, marine biology, and ornithology as part of this class. The hands-on experience gained during the course will compliment and augment the knowledge that students glean from an online/classroom setting. During this trip, we will go on a guided

snorkeling trip in Cabo Pulmo National Park, hike in the Sierra de La Laguna UNESCO biosphere reserve, visit some of the oldest Spanish missions on the peninsula, hike to see Native American pictographs, and more. Students will make their own flight arrangements, and I will pick people up at the airport in Mexico on October 19th. Prior to the field trip, in order to familiarize yourself with Baja California, a short paper will be due.

Course Objectives:

1. Gain an appreciation for the biodiversity of Baja California Sur (BCS)
2. Learn about the Spanish cultural history of BCS, and explore Mexican culture
3. Learn about BCS ecology and ecosystems
4. Learn about flora and fauna of BCS
5. Apply classroom knowledge to real world situations
6. Develop field skills through application

Travel Itinerary: October 2024, Baja California Sur, Mexico

October 18th: Bryan Drew will arrive to BCS, pick up a rental vehicle, and stay at an Airbnb near Los Barriles, BCS.

October 19th: Bryan Drew will pick up students at the airport in San Jose del Cabo. We will sleep at an Airbnb near Los Barriles, BCS.

October 20th: We will spend the entire day hiking in the Sierra de La Laguna UNESCO biosphere reserve. Students will learn about ecology, botany, ornithology, and entomology. We will sleep at an Airbnb near Los Barriles, BCS.

October 21st: We will go on a guided snorkeling trip in Cabo Pulmo National Park in the morning and go on a short hike before returning to sleep at an Airbnb near Los Barriles, BCS.

October 22nd: We will hike to pictographs north of El Cardonal and also go snorkeling in the area. We will discuss ecology, botany, ornithology, and entomology. We will sleep at an Airbnb near Los Barriles, BCS.

October 23rd: We will travel to Loreto, BCS. On the way we will stop at the wastewater treatment plant outside of La Paz to go birdwatching and will go on a short hike. We will stay at a hotel in Loreto.

October 24th: We will hike through Steinbeck canyon south of Loreto and discuss the geology of the Sierra de la Giganta Mountains, go snorkeling at a nearby reserve, and visit a Spanish mission in San Javier. We will sleep at a hotel in Loreto.

October 25th: We will drive north towards Mulejé and explore some canyons along the way. We will sleep at a hotel in Loreto.

October 26th: We will drive to Todos Santos, BCS. We will go to the beach north of Todos Santos to try to see whales and other marine activity. We will spend the night at a hotel in Todos Santos.

October 27th: We will return home.