QUALIFICATIONS 2022-2023

2015- Biologist of the Year Award- Native American Fish and Wildlife Society

2020 Special Recognition National Award Winner

2022 Distinguished Service Award- Nebraska State Chapter of the American Fisheries Society

2022-Nominated for Distinguished Alumni Award for Texas State University

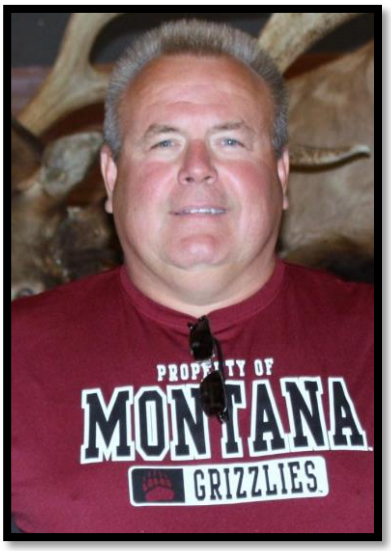
NEW CENTURY ENVIRONMENTAL LLC

~Established 2007~
15 year Anniversary in 2022

New Century Environmental LLC (NCE), an environmental consulting firm in Columbus, Nebraska. We employ a team of environmental and ecological professionals who provide quality environmental services in a cost-effective and timely manner for clients across the Great Plains. NCE was established in 2007 and offers a full array of services and products to enhance environmental compliance, with effective resource management. NCE is one of the leading threatened and endangered species firms in the Great Plains and numerous sensitive and rare species documentations when compared to other firms. State and federal agencies and the academic community recognize the proficiency and credibility of the work NCE provides numerous clients. NCE has provided environmental support for wind farms in 5 states, FERC and CWA support for Loup Power District the past 10 years. We have also been contracted to conduct plant inventories and write plant identification books for Native American tribes in the Midwest, conduct wildlife research for energy developers, and develop wetland delineation/mitigation plans for more efficient agricultural development. NCE is qualified to develop mitigation banks across the region.

Company Highlights

- **NCE provides** environmental support and expertise for the energy, transportation, agricultural and mining industry across the Great Plains; and does it cost effectively!
- **NCE** has written over 3.5 million dollars in successful fisheries, wildlife, habitat grant awards
- **NCE** has over 50 scientific publications with wetlands, fisheries & wildlife
- **NCE** is regionally and nationally known for work in threatened/endangered species studies
- **NCE** has provided complex expertise for wetland delineation, mitigation and permitting support for a variety of big and small projects in a multi-state region.
- **NCE** is a regional expert in wetlands, small mammal ecology, fisheries, avian ecology and flora inventory and identification.
- **NCE is a national expert** in acoustic bat technology and state and federal agencies consult us regularly.
- **NCE principal** is lead author on "Aquatic Plants of Nebraska" a collaborative effort between UNL, UNO, and the private sector. The first for Nebraska book is to be published in early 2022.



Keynote biodiversity attributes;

1- Over 1000 flora records; several unique flora discoveries of rare and unusual species in numerous states.
2- Discovery of the black footed ferret in South Dakota (official) and North Dakota (un-official)
3- Documentation of the federally threatened northern long eared bat in North Dakota (2016) and in Nebraska (2020-2021).
4- Numerous fish species documentations of Tier I, Tier II, listed species in Nebraska and the Dakotas. Potential un-official discovery of the Topeka shiner in northeast Kansas. Iowa Tribe of Kansas and Nebraska reservation.
5- Documentations of amphibian, reptile, and pelecypod species across Great Plains.
6- American burying beetle surveys in central and western Nebraska.
7- Least tern and piping plover surveys and documentation in Nebraska and the Dakotas, as well other Tier I and Tier II bird species. NCE has worked with numerous species with conservation priority.
8- Key permit support for renewable and linear transportation and infrastructure projects.

Michael P. Gutzmer, PhD
Principal, Naturalist

Our Principal has a total of 50 years of environmental management-related experience and a national network of available experts. Before starting his own consulting business in 2007, he was an Environment Regional Manager for the Electric Power Research Institute in the Great Plains region for 5 years; he was an Environmental Supervisor in Environmental Services at Nebraska Public Power District where he also served as a Senior and Staff Environmental Specialist for over 13 years. He was responsible for water and waste, facility-siting, auditing, and natural resource permitting and compliance. Dr. Gutzmer, while at NPPD, also served as an environmental sub-consultant in aquatic ecology for 10 years. Before that, Dr. Gutzmer worked for several state and federal environmental agencies including the Bureau of Land Management in Arizona, National Park Service in Washington, Montana Department of Fish, Wildlife and Parks, Canadian Ministry of Fisheries, Iowa Conservation Commission, Texas Water Commission, and the Nebraska Department of Environmental Quality.

Dr. Gutzmer received a BS degree in agriculture and natural resources from the University of Nebraska in Lincoln and an MS degree in biology from Texas State University. He took courses from the University of Montana and then

completed his PhD in environmental sciences and wetland ecology at Lacrosse University. He is a Certified Fisheries Scientist, Professional Wetland Scientist, Certified Wildlife Biologist, Certified Senior Ecologist, and a Certified Environmental Professional and a Technical Service Provider for the National Resource Conservation Service. Mike was nominated as a Board of Director for the Alumni Association at the University of Montana in Missoula in spring 2014.

Over 50 peer-reviewed scientific publications, 375 consultant reports and 250 environmental subject matter articles published in local, regional newspapers and magazines, elevated awareness of nature and conservation programs throughout Nebraska and Midwest.

- *Pioneered efforts with first bio- assessment program in Superfund program in Texas in 1988.*
- *ESPN Outdoors finalist for National Conservation Director of BASS in 2003.*
- *Acknowledged in "The Flora of Nebraska" by Robert B. Kaul, David M. Sutherland and Steven B. Rolfsmeier published in 2006, Institute of Agriculture and Natural Resources, University of Nebraska-Lincoln, for distribution information and voucher specimens collected for dissertation work focused on Platte county wetlands during 1993-2007.*
- *Nominated and finalist for Central Community College of Nebraska Outstanding Alumni of the Year Award, April 2008.*
- *Successful project award for an eco- asset project evaluation for a significant client conducted in the United States – January 2009.*
- *Published Plants of Platte County Nebraska Wetlands book available for publication. M.P. Gutzmer. 2012. The UPS Store Publication office, Columbus*
- *Biologist of the Year nominee (2014) by the Native American Fish & Wildlife Society*
- *Named Regional Biologist of the Year-Great Plains in 2015*
- *Developed template for the first agricultural wetland bank in Nebraska for Ag Drainage Inc. July 2016*
- *Created template for flora book for the Iowa Tribes of Kansas and Nebraska*
- *Society of Wetland Scientists certified Dr. Gutzmer for another 5 years (July 2017)*
- *July 2017 – NCE conducted ecological assessment of the Missouri River below the DAPL pipeline crossing providing some of the first baseline biological information to be used adjacent to Standing Rock Indian Reservation.*
- *NCE has supported a major federal highway project in Omaha Nebraska at 180th & Blondo with wetland mitigation.*
- *NCE has been involved with numerous solar and wind farm project permit assessments and permit receipt in Pennsylvania, Nebraska, Minnesota, North and South Dakota within the Great Plains.*
- *Gutzmer has conducted botanical overviews in Europe; The Netherlands, Germany, Ireland and France. In 2018 he also conducted a mini-assessment of flora in Central Texas, USA.*
- *In February 2019 Gutzmer was nominated as a Fellow for the The Wildlife Society, a nationwide designation.*
- *In July 2019 NCE was awarded a contract to sample Nebraska streams for the Keystone XL Pipeline-TransCanada project for sensitive fish species and some wetland work. NCE was able to assist the pipeline project for 2 years.*
- *In July 2019 NCE began work on a BIA funded project to evaluate invasive species on the Santee Indian Reservation. Over 100 flora distribution records were documented.*
- *In August 2019 Dr. Gutzmer conducted representative flora observations in Germany, The Netherlands, Austria, Czechoslovakia and Hungary.*
- *In January 2020, Gutzmer was awarded Emeritus Status as a Certified Fisheries Professional with the American Fisheries Society, Bethesda Maryland.*
- *In May 2020, Gutzmer received notification that his book "Aquatic Plants of Nebraska" will be published by University of Nebraska, School of Natural Resources, Conservation Survey Division, sometime in spring 2022.*
- *In July 2021, NCE recently released the now published "Mammals of Santee" for the Santee Sioux Tribe and the guide/book and is currently available at the reservation.*
- *NCE biologists have discovered and documented the federally threatened northern long eared bat in July near the Niobrara and the Missouri River. Publication is being drafted.*
- *NCE is preparing a tribal EIS for a pipeline crossing addressing all plant and animal groups in 2021-2022.*

Gutzmer honored by
The Wildlife Society with National Award

In mid-June Michael Gutzmer was notified by The National Wildlife Society that he had been selected to receive The Wildlife Society's Special Recognition Service Award for 2020. This award honors a person or group who has made an outstanding contribution over the short or long term to the wildlife profession. The presentation will be made formal in a virtual setting at the 27th Annual Conference which will be held in Louisville, Kentucky, Sept. 27 – Oct. 1, 2020.

With more than11, 000 members in several countries the society was founded in 1937, the organization's mission is "To inspire, empower, and enable wildlife professionals to sustain wildlife populations and habitats through science-based management and conservation."

The Wildlife Society enhances members' networking and learning opportunities, professional and career development, and provides numerous ways for them to get more involved in creating a better future for wildlife and their habitats for: :

- Scientists, managers, educators, technicians, planners, consultants and others who manage, conserve, and study wildlife populations and habitats.
- Students who are pursuing degrees and experience that will enable them to become the next generation of wildlife professionals.
- Supporters who help spread the word and take action on important wildlife and habitat issues.

Dr. Gutzmer is one of a very few individuals nationwide that has been active in the Native American Fish and Wildlife Society, the American Fisheries Society and the Wildlife Society and has made immense strides in conservation and natural science in the wildlife profession. Gutzmer received the *Biologist of the Year Award* from the Native American Fish & Wildlife Society –Great Plains Region in 2015.

Gutzmer' work with flora, wetlands, and threatened and endangered species across the Great Plains and the U.S. is very well known in the scientific community.

Some of his accomplishments include; Gutzmer guided and administered the development of the largest eco-asset project ever conducted in the United States for a railroad. His firm, New Century Environmental (NCE) developed the Eco-asset Baseline Evaluation (EBE) process, site shadow concept, classification zonation concept and innovative credit stacking models which prioritize sites based on ecosystem services and other relevant metrics. The project covered 14 states (given high merit by the National Wildlife Federation, Ducks Unlimited and The Nature Conservancy national organizations) in the American west. During the eco-assets evaluation, Mike developed a windshield inventory for invasive species that may be the best approach in North America for macro flora invasive species inventory and proved cost effective for an ever growing invasive plant problem in the U.S.

In 2016-2018, Mikes firm was the only group of biologists that brought key aquatic flora and fauna (birds and fish) data sets to the legal process for a pipeline protest that made a difference in the decision making evolution during the USACOE review process on the upper Missouri River on a controversial pipeline process.

Gutzmer is concept founder of the Tribal Science Area (TSA) for Standing Rock Indian Reservation and other Great Plains tribes (February 2020). Gutzmer' discovered the black-footed ferret on Standing Rock Indian Reservation and has unofficially documented them in North Dakota. He has numerous plant and animal discoveries and documentations across the country in addition to the black-footed ferret. Michael' firm has also been contracted to conduct fish & wildlife surveys on millions of acres of Native American Indian Reservation land in Nebraska, Iowa, Montana, Minnesota, Kansas and the Dakotas and has written over 3 million dollars in grants for them.

Gutzmer has written several flora books and is currently writing Aquatic Plants of Nebraska to be published by the University of Nebraska' School of Natural Resources scheduled for publication in late 2021.

Locally Gutzmer' firm supports Loup Power District with FERC compliance articles that deal with threatened and endangered species, wetlands, and fisheries issues, along with invasive species. The firm does extensive wetland work across the state as well.

Gutzmer and his wife Melanie live in Columbus and have four adult children. His daughters, Alex and Lexie work for Delta Airlines in Omaha and his sons, Seth (wildlife management) and Wyatt (business and marketing) go to UNL and UNK, respectively.

IMPORTANT DISCOVERIES: Almost a thousand flora distribution records, Nelumbo lutea (NE 1997), Un-identified new flora aquatic macrophyte (NE sand hills, 2001), wood frog (SD 2012), Dakota skipper (Roberts County, SD, 2012), black-footed ferret (Corson County, SD, 2012), sicklefin chub, Cheyenne River (1995), smooth green snake, Topeka shiner (Roberts County 2013, 2015). Northern Long Eared Bat, (Corson County, 2015), white ladies slipper, Platte County, Nebraska, (2016) and unofficially the black footed ferret in Sioux County North Dakota, (2014). During 2019 NCE will document over 150 new flora county distribution records.

NCE full, part time, and seasonal staff 2022-2023

Anthony Byrne
Senior Associate Scientist

Mr. Byrne has over 30 years of ecological research and natural resource management experience involving numerous environmental projects in 18 states in the Western, Midwestern and Southeastern U.S. He previously worked for environmental consulting firms in Colorado and Arizona. Before entering the ecological consulting field, Tony worked as a fishery biologist for the Nebraska Game and Parks Commission, a fishery and wildlife habitat biologist for the Texas Parks and Wildlife Department, a fish and wildlife technician for the Colorado Division of Wildlife (now Colorado Parks and Wildlife Department), and a laboratory technician for the Colorado State University Larval Fish Laboratory. His broad background, ranging from fisheries and wildlife management and research to resource litigation support, provides him with considerable knowledge of environmental ecology. As an ecologist, he has extensive training that includes fish and wildlife community assessment, natural resource management plan formulation, research study design, aquatic and terrestrial habitat evaluation and enhancement design, wetland assessment and delineation, angler and hunter survey design and analysis, scientific database management and statistical inference, ecological modeling, and macroinvertebrate community assessment.

Tony has been associated with assessments of impacts to numerous aquatic, terrestrial, riparian and wetland systems; many related to threatened and endangered and rare and sensitive species. These include studying effects from mining, hydropower, wind power, industry, transportation, agriculture, and water and wastewater development. Many of these projects involved consultation related to NEPA, CWA, NRDA, ESA and other government environmental programs.

Tony received a BS degree in fishery biology (minor in wildlife biology) from Colorado State University in Fort Collins and an MS degree in ecology from the University of Denver. He is active in the American Fisheries Society, The Wildlife Society, the North American Benthological Society, the North American Lake Management Society, Ducks Unlimited and the Mule Deer Foundation.

Some of Tony's career highlights include:

- Over 200 scientific project reports and journal publications, ranging from macroinvertebrate studies, sensitive flora and fauna investigations and wetland evaluations, to fishery, wildlife and habitat management and environmental impact assessments

- While with the Texas Parks and Wildlife Department, conducted a long term hybrid striped bass (wiper) recruitment and growth study on Sam Rayburn and Toledo Bend Reservoirs, resulting in the Texas hatchery program implementing a statewide fry, rather than fingerling, stocking policy, thereby saving the state thousands of dollars annually

- Has conducted numerous stream studies, incorporating instream flow, macroinvertebrates, fish, and instream and riparian habitat, in Nebraska, Colorado, South Dakota, Texas, Wyoming, Arizona, Montana, Idaho, Utah, New Mexico and California

- Has been instrumental in the development of stream-specific instream flow standards for various streams and rivers in Colorado, Nebraska, Montana, and California. Such were supported using IFIM and PHABSIM to model physical habitat availability to identify critical stream reaches. Stream temperature models (using SNTEMP) were used to assess water temperature suitability for various life stages of fish

- Is recognized as a regional taxonomic expert and biometrician for macroinvertebrates in the Western and Midwestern U.S.

- Has conducted numerous stream and river investigations on Great Plains ecosystems for aquatic habitat, macroinvertebrates, and fish, including the Platte, North Platte and Loup Rivers (Nebraska), and the Cheyenne, Moreau and Missouri Rivers (South Dakota). He is recognized as a Great Plains expert in plains riverine fish communities.

- Aided in identification of critical habitat components and aquatic life use-designations on Ralston, Big Dry, Little Dry and Fountain Creeks (Colorado) and the Santa Ana River (California)

- Assessed mining impacts to aquatic ecological resources, including macroinvertebrates and fish, on Thompson and Squaw Creeks (Idaho), Clarks Fork River and Silver Bow Creek (Montana), Upper Colorado River Basin, Snake River, West Fork Clear Creek and Williams Fork River (Colorado), and Whitewood Creek and Belle Fourche River (South Dakota)

- Assisted the Bureau of Reclamation with a five-year fish study on the Middle Rio Grande River, New Mexico

Jordan M. Kort
Associate Fisheries & Wildlife Biologist

Jordan started working for NCE in 2019. Jordan has assisted with aerial, T & E, invasive, fishery, wetland and other surveys for several of our clients. In 2016 he worked on a commercial fishing boat in Alaska where he has gained experience in handling gill nets and sampling fish. Jordan has a strong agricultural and farming background. Jordan has obtained a degree in Environmental Studies from Doane University, along with a minor in Ag Science from Central Community College. While Jordan was at Doane he did independent student research. He spent the winter months observing raccoon pelt colors dependent upon environment factors.

While holding a part time job and being a full time student at Doane University, Jordan was also part of the men's soccer team where he started two years for them and two years for central community college. His college soccer experience has taught him leadership skills and how to efficiently work with others to complete a task. In his leisure time he enjoys fishing, hunting, and anything that gets him outdoors. Jordan has been playing sports his whole life and likes to keep involved with anything that is competitive. This is prevalent in his records as a four year starter and four year state qualifier on his high school soccer team. Jordan is an excellent predator caller.

Jordan is an expert ground surveyor for wildlife surveys and has become proficient in acoustic bat analysis using Sonobat and Kaleidoscope software programs. Jordan' fish taxonomy is also improving through current fish assessments conducted in the Great Plains.

Kurt J. Tooley

Senior Research Scientist, Mathematician, Theoretical Ecologist

Educated at the Universities of Chicago and Illinois at Champaign-Urbana, Kurt Tooley is a scientist specializing in research, scientific technique, quantification, and related scientific methods. Tooley has 25 years of experience working for academics, government agencies, businesses, non-profits, and entrepreneurs. Kurt is one of the leading acoustic bat monitoring experts in the United States. His experience in theoretical ecology is second to none.

Tooley's primary function with New Century Environmental is to facilitate bringing the best possible product from any available budget, or, alternatively, producing a product of sufficient quality with the least possible budget, by making the best applicable scientific methods readily accessible. This is accomplished not only by leveraging extensive experience and knowledge of science, but also by flexibly and continuously communicating, coordinating, and team-building with clients, diverse NCE personnel, and other project participants.

In addition to broadly scientific work, Tooley is also engaged in the development of technology and intellectual property of diverse types. Tooley is the inventor of patented technologies that exploit innovative adaptations of imaging, astronomical, and evolutionary-ecological techniques and theory to reveal optimal solutions to problems that were previously thought unsolvable.

Tooley's ongoing education includes the humbling and high perspiration task of learning the thousands of plants and thousands of birds necessary to becoming a field botanist (Thank you, Dr. Gutzmer!) and field ornithologist, and all the techniques of trapping and camera trapping.

- Dean's List, University of Chicago
- Transferred to U. of Illinois at Champaign-Urbana to accept a staff research position
- Evaluated math and science education programs for the National Science Foundation
- Wrote and published peer-reviewed papers on hierarchical, longitudinal modeling in leading journals (Primarily with Dr. Finbarr C. Sloane)
- Extensive field experience in all eco-region domains, division, and provinces in the contiguous U.S.
- Sole author of the textual content of more than 2,000 military museum exhibits
- Sole author of the textual content of more than 1000 paleontology museum exhibits
- Hobbies include: cycling, golf, hiking, camping, photography, and cooking

Seth Gutzmer, B.S.

Associate Biologist

Is a boots on the ground expert who has worked for NCE over the past year collecting data for biological assessments conducting data analysis and writing core reports. Seth was a Wildlife Technician in Lewellen Nebraska for the Nebraska Game and Parks Commission in spring and summer 2019 and 2020 performing habitat improvement duties. He is currently a senior in wildlife management at UNL. Seth is currently specializing in big game and habitat management. . Seth graduated from UNL with a *B.S degree in Wildlife & Fisheries in May 2021* as well. Seth has been offered a graduate assistantship from the University of Central Missouri to work flora and fauna impacts from solar and wind renewable energy facilities. He will be teaching biology, ecology and wildlife management labs for the University.

His experience is handling gill nets, electroshocking fish collection and periphyton sampling in Nebraska sand bed streams (Plum Creek). Seth has also assisted with bird diversity and abundance studies for wind farm development in Roberts County South Dakota, nocturnal black footed ferret studies in North and South Dakota for the Standing Rock Indian Reservation and has helped with several lake projects doing water quality and fish removal. Seth is 1/8th Native American (Sioux), and attended high school at Scotus Central Catholic in Columbus Nebraska. Seth was a cub scout and has been very active in sports since youth. Seth was a high school football varsity long snapper and linebacker and was the varsity wrestling 182 pound weight class and state qualifier for the Shamrocks in 2016 and 4th place NSAA finalist in all of Nebraska. Seth was a long snapper for the South Dakota State Jackrabbits football team in 2016-2017. Seth's plans are to finish a Master's degree and obtain a Doctorate in natural resources and gain more experience in wildlife management and eventually assume leadership at New Century Environmental.

Publications

Gutzmer M.P., K. Tooley , M. S. Franks , C. J. Shank, S. M. Gutzmer , W.P. Gutzmer , J. C. Kelly , A. Quinn , and A. T. Byrne. 2018. **Small Mammal Abundance on the Standing Rock and Lake Traverse Indian Reservations In North And South Dakota**. *Proceedings of the South Dakota Academy of Science*, Vol. 97 (2018) 8

Gutzmer, M.P., J.M. Kort, S.M. Gutzmer, K. Tooley, A. Bartling, and J. Avery. 2021. ***Mammals of Santee.*** *Office of Environmental Protection Department*, Santee Sioux Nation Reservation. Big Red Printing, Norfolk Nebraska|145 pages

Gutzmer, Michael, Anthony T. Byrne, Seth Gutzmer, Jordan Kort, and Kurt Tooley. 2022. **An Assessment Of Climatic Environmental Conditions On *Morchella esculenta*, Morel Mushroom Harvest In The Platte And Loup River Bottomlands In The Vicinity Of Platte County, Nebraska 1995-2011.** *Journal of Agriculture and Food Research. Click here to access/download; Manuscript; MorelPaper_September2021_NCE*

Certifications

Associate Wildlife Biologist (AWB) (applied 2021-pending)
Associate Fisheries Professional (AFP) (applied 2021-pending)

Jack Pritchett M.S.

Project Manager / Project Ecologist

Jack is a Project Manager, ecologist and GIS coordinator. He has an MS in Environmental Policy and Management from Florida International University where he completed his thesis on the impacts of the invasive ball python to the environmentally sensitive Florida Everglades. He also has a BS double in biology and psychology from the University of Central Florida. A native of South Florida, Jack worked as the crew leader for the Institute of Regional Conservation, a non-for-profit organization who is dedicated to the protection, restoration, and long-term management of biodiversity on a regional basis, and to the prevention of regional extinctions of rare plants, animals and ecosystems. In 2014 Jack began working with Muni Farms, an agriculture and sustainable landscaping company and managed many projects with various counties in preserving and maintaining natural spaces throughout South Florida. With a strong background in land management and water conservation, Jack moved to Colorado in 2018 to continue his career in environmental conservation. Jack began working as a park ranger with the City of Denver Parks and Recreation Department and later began working with the Colorado Parks and Wildlife Department, which he has now moved from to join the ERS and NCE teams.

As an ecologist, Jack oversees numerous natural resource permitting and compliance projects and serves as a participating biologist on projects including, but not limited to, wetland delineation and functional assessment, macroinvertebrate and fish sampling, comprehensive wildlife surveys, terrestrial and aquatic habitat assessment, restoration and improvement, and sensitive flora surveys. In this position, Jack has developed a good understanding and working relationships with the U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, Environmental Protection Agency, and a multitude of other government and non-government agencies.

Jack has become an integral part of our team, providing technical expertise and a dedicated work ethic with regard to project design, field data collection, technical writing and report preparation. Jack is responsible for coordinating field surveys, collecting field data, drafting technical reports, supervising technical staff, and analyzing biological samples in the laboratory. As a staff biologist, he has considerable training that includes fish and wildlife assessment, aquatic and terrestrial habitat evaluation, plant identification, wetland delineation, and GIS mapping and bathymetric surveys.

Brady Gabbert B.S.

Ecological Technician/GIS Field Specialist

Brady earned his BS degree in fishery and wildlife biology (concentration in fisheries and aquatic sciences) from Colorado State University. He is experienced with sampling both aquatic and terrestrial ecosystems, including invertebrate sampling, wetland delineation, and fish and wildlife surveys. Brady has experience with ESA species recovery design, habitat assessment and restoration project design and implementation, and ecological risk assessment from urban development, oil and gas, mining, and agricultural operations. Brady is also experienced with several hydrology methods, including land use hydrology, potential evaporation analysis, water table contouring to determine flow direction, hydraulic flow rate and groundwater flow using Darcy's Law, and infiltration measurement via ring infiltrometer.

Brady is responsible for coordination and completion of field surveys, data compilation and analysis, laboratory sample process and analysis, critical literature review, and report preparation assistance. He is also called upon to collect GIS data in the field, including completion of bathymetric surveys, wetland delineations, instream and riparian habitat, and wildlife habitat, in general.

Dr. Justin Hobert
Associate Scientist

Justin has a PhD in herpetology and helps NCE on complex amphibian and reptile projects. He has worked with numerous rare reptiles in the desert southwest.

Justin received his doctorate from the University of Texas El Paso (Interspecific competition and niche partitioning of two rattlesnake species in western Texas), his MS in biology from the University of Northern Colorado, and his BS in zoology from Southern Illinois University. He also served as an adjunct instructor of herpetology at New Mexico State University. Before returning to ERS in 2017 (he was employed with us from 1998 to 2000 and left to pursue his doctorate), he worked on the White Sands Missile Range as a subcontracted biologist. He also served as a biologist on Fort Bliss United States Army Installation facilities. Justin is responsible for study and survey design, field supervision, complex data analysis and modeling, data interpretation and report preparation, and witness testimony.

Justin's career highlights include:

- Conducted a black bear habitat use and movement project in New Mexico; fitting radio collars on bears and using trail cameras for movement and census analysis.

- Acted as lead investigator for kit fox, and other mesocarnivore census surveys using trail camera methods.
- Acted a lead investigator and POC for census and genetic variation studies at the White Sands ecotones of 3 lizard species for two survey seasons.

- Participated in the continuing population long-term monitoring program of bats on the White Sands Missile Range.

- Principal contributor in migratory bird planning level surveys for the White Sands Missile Range and participated in an ongoing bird banding study at San Andres Wildlife Refuge, New Mexico.

- Performed numerous aerial and ground count surveys for golden eagle nest occupancy and success; and aerial salt cedar quantification.

- Organized and maintained database for thousands of photographs of bears and kit foxes for identification and distribution investigations.

- Planned, coordinated, and conducted status survey projects and delivered biological and survey reports for the following state or federally listed and candidate species on military installations: the Organ Mountains population of the Colorado chipmunk; gray-footed chipmunk in the Sacramento Mountains; terrestrial woodland snails of the genus *Ashmunella* in the Organ Mountains; and gray vireos in the Sacramento and San Andres Mountains. Furthermore, a major

participant in status and census surveys for the Oscura Mountains chipmunk, Aplomado falcon, Burrowing owl, Todsen's pennyroyal, and amphibians and reptiles. In addition, planned, coordinated, and participated in species diversity survey efforts for bats and invertebrates of desert playas. Other ancillary projects of note include radio-tracking deer as part of a chronic wasting disease (CWD) study, oryx hunt administrative assistant, wildlife nuisance calls, and maintaining a display aquarium of the endangered White Sands pupfish.

- Provided expert scientific and technical advice in planning, developing, and implementing a broad/complex program in the areas of ecology, particularly animal ecology, and general biology. Participated in WSMR Safety Stand-Down Day and how human safety relates to relationships with wildlife. Presented wildlife safety briefings to civil service personnel.

David L. Jenson [Contributing Part-Time subcontractor]
Associate Biologist, Emeritus - "Grandpa"

Dave received his Bachelor of Science Degree in Biology (with Emphasis on Wildlife Conservation), from Kearney State College (currently University of Nebraska at Kearney) in August 1978. He received his Associate Degree in Science, (Biology) from Platte Technical Community College (currently Central Community College, Platte Campus), in Columbus, Nebraska in May 1976.

- As a Soil Conservation Technician with the Natural Resources Conservation Service in Beatrice, NE for over 6 years, Dave coordinated work between landowners and the Lower Big Blue Natural Resource District involving the layout/design of windbreak and wildlife tree/shrub plantings, drafted planting plans and conducted annual status reviews on Conservation Reserve Program (CRP) acres to monitor grass/legume establishment. He also assisted with the sign-up of new CRP land acres in Gage Co.
- While working as a Conservation Technician in the Resource Services Division with the Nebraska Game and Parks Commission, he worked extensively with wildlife management and conservation projects in the Salt Valley Lakes area near Lincoln, NE.
- Identifying problem prairie vegetation management areas and providing alternative methods for restoration to native tallgrass prairie species was a large part of Dave's position as a Park Technician in the Resource Management Division with the National Park Service, (Homestead National Monument), near Beatrice, NE for 5+ years. Dave conducted numerous bird and mammal surveys, assisted with prescribed prairie burns and wrote numerous papers documenting the results of various resource management projects that he spearheaded. He also designed and created the Monument's 1st bird checklist and herbarium. As a result, Dave has become very proficient in the identification of Nebraska flora and fauna species.
- As a Biological Aid for the US Fish and Wildlife Service, he gained invaluable experience working on the research team that conducted and composed the 3 year study, *The Platte River Ecology Study* near Kearney, NE. Dave worked with sandhill crane censusing and telemetry tracking of birds, conducted raptor surveys, performed Bald eagle surveys (including food habits studies and roost censusing), located nesting colonies of least terns and piping plovers plus documented detailed habitat characteristics of each nesting area. Other research involved coring and aging trees, vegetation encroachment on river sandbars and waste grain availability studies involving waterfowl and cranes.
- Other noteworthy positions that Dave has held include college greenhouse manager, herbarium aid, volunteer ornithologist for the North American Breeding Bird Survey for 3 years, volunteer fisheries biologist for the Nebr. Game and Parks Commission, habitat committee chairman for Pheasants Forever and fisheries investigator for the Nature Conservancy in central Nebraska.

Dave has worked for NCE for 3 winters (2013 – 2015) and has a particular interest and knowledge of composing project reports, floral research/identification, ornithological investigations, fisheries management and wetland mitigation projects. He has co-authored a plant identification book plus a number of technical papers with NCE.

David Martinez

Ecological Technician / GIS Field Specialist

David earned his BS degree in fishery and wildlife biology (concentration in fisheries and aquatic sciences) from Oregon State University. He is experienced with sampling both aquatic and terrestrial ecosystems, including invertebrate sampling, wetland delineation, and fish and wildlife surveys. David has experience with fish and invertebrate identification, fishery habitat assessment and restoration, fishery project design and implementation.

David is responsible for coordination and completion of field surveys, data compilation and analysis, laboratory sample process and analysis, critical literature review, and report preparation assistance. He is also called upon to collect GIS data in the field, including completion of bathymetric surveys, wetland delineations, instream and riparian habitat, and wildlife habitat, in general.

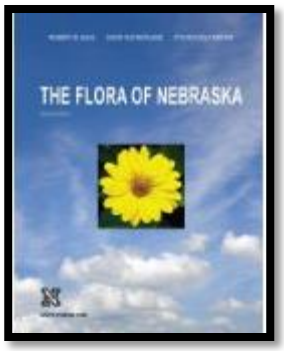
Wyatt Gutzmer B.S. (part-time)
Field Technician & Specialist

Is a field technician who has worked for NCE over the past 5 summers collecting data for biological studies. His experience is handling gill nets, electroshocking fish collection and periphyton sampling in Nebraska sand bed streams (Plum Creek). Wyatt has also assisted with bird diversity and abundance studies for wind farm development in Roberts County South Dakota, nocturnal black footed ferret studies in North and South Dakota for the Standing Rock Indian Reservation and has helped with several lake projects doing water quality and fish removal. Wyatt is 1/8th Native American (Sioux), and attended high school at Scotus Central Catholic in Columbus Nebraska. Wyatt was a cub scout and has been very active in sports since he was a boy. He has played Mariners baseball, midget football and participated in junior high wrestling and football. Wyatt was an elementary school All-American in AAU wrestling and participated in Duncan wrestling.

Wyatt was a high school football varsity lineman, co-captain and linebacker (received the Jeff Podraza Scholarship) and was the varsity 220 pound weight class qualifier for the Shamrocks in 2014 through 2016. Wyatt was a state consolation final champion in 2016 and 2017 at the NSAA state championships in Omaha. Wyatt was selected for People to People Ambassador program in summer 2014 for his leadership skills. Wyatt's plans are to obtain a business and marketing degree. and work as a business developer. Wyatt has a business degree from the University of Nebraska-Kearney and currently works for Norfolk Iron and Metal as a purchasing specialist. He travels the American west providing guidance for NIM distribution facilities.

Bob Kaul and Mike Gutzmer assessing/collecting submergent aquatic macrophytes in Minnechaduza Creek, near Valentine, Cherry County, Nebraska. This photo was taken by Martha Kaul, in mid-summer 1993, I believe. If I remember we vouchered Potomogeton zosteriformis and a half dozen other Potomogetons…

IN MEMORY OF:



Dr. Robert B. Kaul [deceased November 14, 2019]

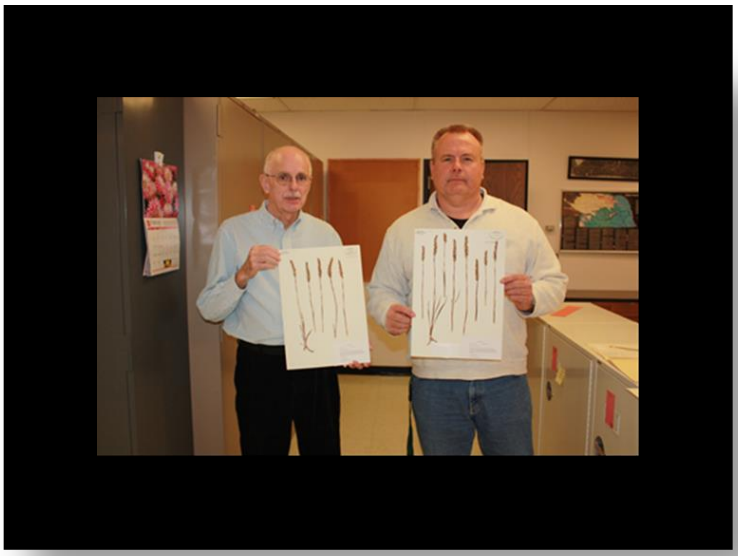
Professor Emeritus of Botany
World Flora Taxonomic Expert

Dr. Kaul was Research Professor and Curator, University of Nebraska State Museum of Natural History, Professor Emeritus of Botany, School of Biological Sciences at the University of Nebraska-Lincoln and assists NCE with critical guidance on plant taxonomy changes and serves as liaison for a variety of projects involving wetlands across the Great Plains and inventory approaches and scientific accuracy. Dr. Kaul is a world expert in the field of aquatic angiosperm reproduction and was considered one of the leading botanical taxonomists in the world.

B.S. 1957, University of Minnesota, Minneapolis (biology)
M.A. 1959, University of Minnesota, Minneapolis (plant ecology)
University of Montana, Missoula, 1960
Ph.D. 1964 University of Minnesota, Minneapolis (botany)
University of Nebraska-Lincoln

- Research Professor and Curator, State Museum, 2003-PRESENT
- Interim Director, State Museum, 2003
- Professor Emeritus, School of Biological Sciences, 2000-
- Professor, Dept. of Botany & School of Biological Sciences, 1964-2000
- Vice Director, School of Biol. Sciences., 1989-1991
- Chairman, Ecology & Systematics Section, School of Biological Sciences 1974-77, 1981-82

Conducted research in Arizona, California, Colorado, Connecticut, Florida, Hawaii, Idaho, Maine, Minnesota, Montana, Nebraska, New Mexico, Oregon, Texas, Washington, Wisconsin, Australia, Borneo, Canada, Ceylon, Greece, India, Iran, Japan, Malaysia, Mexico, New Zealand, and the Philippines.



Dr. Bob and Mike at the UNL Bessey Herbarium (2010). Bob we sure miss you!