

# Mike Proctor

Senior Research Associate - Range & Wildlife Ecology

## Curriculum Vitae

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## Education

Degree	Major	Received	Institution
M.S.	Biology	1992	Fort Hays, State Univ, Hays, KS
B.S.	Wildlife Conservation	1989	Southeastern Oklahoma State Univ, Durant, OK

## Employment

- Senior Research Associate, Range and Wildlife Ecology, Noble Research Institute, Ardmore, OK. Jan 2010 to present.
  - Coordinate field research activities
  - Collect, manage, and process various types of data including images, acoustics, and geo-spatial
  - Build sampling equipment
  - Prescribed Fire Burn Crew member
  - Troubleshoot and resolve issues with data collection devices and databases
  - Acquire RGB and NDVI imagery with UAV - > 50 flights conducted
  - Data Management Committee 2015 - 2020
  - Applied Technology Team 2018-2019
- Private Consultant, Sep 2009.
  - Bait away and environmental assessment for American Burying Beetle for the City of Madill, OK
- Contract Field Biologist, May 2006 - Jun 2009 - Dixie Environmental Services Co., Magnolia, TX
  - Worked with federal agencies (NPS, USFW, USFS), commercial shareholders, and private landowners to ensure that protocols and practices established to minimize biological impacts were followed during all phases of seismic work.
  - Managed equipment and personnel to facilitate placement and movement of bait stations in accordance with USFWS protocol for American Burying Beetle (ABB)
  - Conducted Bald Eagle surveys to assess impact of seismic activities.
  - Located, established, and sampled vegetation plots in Big Thicket National Preserve (NPS). Classified community types. GPS and map navigation through dense vegetation, swamps and baygalls.
- Certified Science Teacher, Madill Public Schools, Madill, OK. Aug 2000 to July 2005
- Self-employed, Feb 2000 to Dec 2018
  - Azolla Digital Services, a website design, web hosting, computer consulting, and photography firm.
- Adjunct Instructor, Southern Oklahoma Technology Center, Ardmore, OK. 1999-2000
  - Taught Computer Fundamentals, Windows 98, Windows 2000, and Using the Internet.
- Computer Support Tech, 1997-2000 - Multiple firms
- Vegetation Interpretation and Classification Specialist, Oklahoma Cooperative Fish and Wildlife Research Unit, Oklahoma State University, Stillwater, Oklahoma, Jan 1996 to May 1996.
- Research Assist/Associate, Oklahoma Biological Survey, Norman, Oklahoma, Nov 1991 to Feb 1997.
  - Performed and managed floral inventories on military installations across the country.
  - Produced and verified vegetation and wetland maps for military installations.

## Technical Training

- Regenerative Journeys Start with People (Holistic Management International, Sep 2021)
- Ecological Outcome Verification (Savory Institute, Aug 2021)
- Ranching for Profit (Ranch Management Consultants, Aug 2021)
- Holistic Management Fundamentals (Savory Institute, May 2021)
- Holistic Financial Planning (Savory Institute, May 2021)
- Holistic Land Planning (Savory Institute, May 2021)
- Holistic Planned Grazing (Savory Institute, June 2021)
- Ecological Monitoring (Savory Institute, June 2021)
- Understanding Ag: Restoring Soil, Profits, Farms and Futures (Understanding Ag, Mar 2021)
- Regen 101 (Noble Research Institute, Feb 2020)

- Using Drone Based Thermal Imagery for Wildlife Detection and Spatial Analysis The Wildlife Society Annual Conference, Reno, NV, Oct 2019
- Great Plains NatureServe Network Meeting, 2019, Noble Research Institute (organized and hosted 3-day ecology meeting)
- Animal Movement Analyses: A to Z, with Lots of R, 2019, Noble Research Institute (co-organized and hosted 5-day workshop)
- Technical Training Workshop: Control and Management of Wild Pigs, 2018, International Wild Pig Conference (co-organized, hosted and sponsored by Noble Research Institute; organizers S.L. Webb and J.A. Gaskamp; 110 attendees)
- Building, Deploying and Applying Accelerometers to Study Fine-scale Behavior, 2017, Noble Research Institute (organized and hosted Jane Dentinger, Mississippi State University)
- High-throughput phenotyping using mobile devices, 2017, Noble Research Institute (organized and hosted Drs. Amy and Bruce Gooch, and 4 graduate students, Computer Science and Engineering, Texas A&M University)
- A Body in Motion: Movement, Acceleration, and Space Use for Animal Research, 2017, The Samuel Roberts Noble Foundation (organized and hosted Garrett Street, Mississippi State University)
- Meat Goat Boot Camp(OSU Extension, Ada, OK, 2016)
- PrecisionHawk fixed-wing training, Raleigh, NC Feb 2016
- Animal Tracking and Movement Technology: Beyond Beeps, Bells and String, 2015, The Samuel Roberts Noble Foundation (organized summit and hosted Chris Kochanny, VECTRONIC Aerospace GmbH)
- Noble Foundation Prescribed Burn Workshop - 2010 Ardmore, OK

### Employee Development

- DiSC Facilitation Training, (NRI HR Staff, Dec 2021)
- Agile (Agile Foundations; Transitioning from Waterfall to Agile Project Management; Building Your Agile Team; Driving Productive Agile Meetings; Getting Better with Agile Retrospectives; Planning with Agile User Stories; Reporting with Agile Charts and Boards; June-August, 2021)
- The Application of Agile Beyond IT(NRI Aug 2021) Scrum Inc.
- Facilitator's Guide to Participatory Decision-Making (Linda Dowling, Ardmore, OK, March 2021)
- Developing and Implementing an Outward Mindset (2020; Arbinger Institute)
- Ag Equipment Safety (2020)
- Emergency Procedure Awareness Training (2020)
- Developing and Implementing an Outward Mindset (2020; Arbinger Institute)
- Ag Equipment Safety (2020)
- Emergency Procedure Awareness Training (2020)
- Building Trust (2019)
- Effective Listening (2019)
- Safety Awareness Training: Hazard Reporting; Keep Our Workplace Safe; Protect Yourself Properly; Safe and In Control; Sound Mind and Body; Transport Safety; Using Equipment Properly -Compliance Training (2016)
- Bullying and Violence in the Workplace (2014)
- Promoting a Substance-Free Workplace (2014)
- Workplace Harassment Prevention (2014)

### Acquired Skills

Ecology	Technology	Mechanical
Plant community ecology	PC Build/Repair	Welding - MIG & ARC
Plant species identification	Website design and hosting	Acetylene torch
Fire ecology & prescribed fire	GPS	Carpentry
Wildlife ecology	GIS	Off road vehicles
Aquatic ecology	Photography	
Range ecology	Data Management	
Vegetation and wetland mapping	Raspberry PI	
Endangered species	Bioacoustics	
Regenerative Ranching	sUAS Certified Remote Pilot	

### Certifications/Licenses

- Beef Quality Assurance (BQA) | Part 107 UAS Remote Pilot (2016 - valid thru May 2023)

### Just enough knowledge to be dangerous

Machine learning | Image Detection | Sensors | Thermal imaging | Blacksmithing | Horticulture | Social Media

### Memberships

- South Central Arc Users Group
- Society for Range Management - OK & TX chapters
- Southwestern Association of Naturalists
- Oklahoma Academy of Science
- The Wildlife Society - OK & TX chapters - Drone Working Group

### Software environments

General Applications	Geospatial	IDEs
MS Office/365	ARCGIS	RStudio
Google Docs	QGIS	Jupyter Notebooks
Notepad++	GPS PlusX	Anaconda
	Google Earth	

  

Languages	Acoustics	Imagery
R	Kaleidoscope	Darktable
Python	Audacity	GIMP 2
	Raven Pro	FastStone
		Timelapse

### Current Projects

**Webb, S.L., J.A. Martin, M.D. Proctor, and S.M. Harju.** In preparation. Long-term occupancy of male northern bobwhite quail: effects of temporally and spatially dynamic landscapes.

**Wolfe, B., C. Nicholson, M.D. Proctor, and S.L. Webb.** In preparation. Methods for developing and analyzing bioacoustic templates from field recordings: applications to avian ecology.

### Magazine Articles

**Webb, Stephen, Proctor, Mike.** 2020. 7 Things Research Tells Us About Northern Bobwhite and What They Need. Noble News & Views Vol 38 Issue 6 <https://www.noble.org/news/publications/ag-news-and-views/2020/june/7-things-research-tells-us-about-northern-bobwhite-and-what-they-need/>.

**Proctor, Mike, Webb, Stephen.** 2020. Track Annual Changes in Range Vegetation With Online Tool. Noble News & Views Vol 38 Issue 6 <https://www.noble.org/news/publications/ag-news-and-views/2020/june/track-annual-changes-in-range-vegetation-with-online-tool/>.

**Moseley, Will, Smith, Steven, Proctor, Mike, Roberts, Clark.** 2020. Growing-season Burns Improve Habitat and Grazing. Texas Wildlife Association Magazine Issue June 2020 Pages 30-31 <https://www.texas-wildlife.org/resources/publications/category/twa-magazine>.

**Proctor, Mike, Webb, Stephen.** 2020. Capturing Bird Calls and Other Wildlife Sounds With Bioacoustics. Noble News & Views Issue December 2020 <https://www.noble.org/news/publications/ag-news-and-views/2020/december/capturing-bird-calls-and-other-wildlife-sounds-with-bioacoustics/>.

**Gaskamp, Josh, Proctor, Mike.** 2019. Knowing Your Ranch Can Promote Accuracy in Estimating Grazeable Acres. Noble News & Views Vol 37 Issue 11 <https://www.noble.org/news/publications/ag-news-and-views/2019/november/knowing-your-ranch-can-promote-accuracy-in-estimating-grazeable-acres/>.

**Proctor, Mike.** 2019. Why Natural History Collections and Surveys Matter Today. Noble News & Views Vol 37 Issue 7 <https://www.noble.org/news/publications/ag-news-and-views/2019/july/why-natural-history-collections-and-surveys-matter-today/>.

**Proctor, Mike.** 2019. Why Natural History Collections and Surveys Matter Today. Oklahoma Farm & Ranch Issue Dec <http://okfronline.com/2019/12/why-natural-history-collections-and-surveys-matter-today/>.

**Gaskamp, Josh, Proctor, Mike.** 2019. Knowing Your Ranch Can Promote Accuracy in Estimating Grazeable Acres. Oklahoma Farm Report [http://www.oklahomafarmreport.com/wire/news/2019/11/04086\\_NobleResearchGrazeableAcres11132019\\_132806.php](http://www.oklahomafarmreport.com/wire/news/2019/11/04086_NobleResearchGrazeableAcres11132019_132806.php).

**Proctor, Mike.** 2018. Grazing Oklahoma: Musk Thistle. Oklahoma Farm & Ranch Vol 2018 Issue 01 <http://okfronline.com/2018/01/grazing-oklahoma-musk-thistle/>.

- Proctor, Mike.** 2018. Grazing Oklahoma: Honey Locust. Oklahoma Farm & Ranch Vol 2018 Issue 03 <http://okfronline.com/2018/03/grazing-oklahoma-honey-locust/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Tharp's Spiderwort. Oklahoma Farm & Ranch Vol 2018 Issue 04 <http://okfronline.com/2018/04/grazing-oklahoma-tharps-spiderwort/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Passionflower. Oklahoma Farm & Ranch Vol 2018 Issue 07 <http://okfronline.com/2018/07/grazing-oklahoma-passionflower/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Sideoats Gramma. Oklahoma Farm & Ranch Vol 2018 Issue 08
- Proctor, Mike.** 2018. Grazing Oklahoma: Western Ragweed. Oklahoma Farm & Ranch Vol 2018 Issue 09 <http://okfronline.com/2018/09/grazing-oklahoma-western-ragweed-ambrosia-psilostachya/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Winged Sumac and Smooth Sumac. Oklahoma Farm & Ranch Vol 2018 Issue 10 <http://okfronline.com/2018/10/winged-sumac-and-smooth-sumac-rhus-copallinum-and-r-glabra/>.
- Proctor, Mike.** 2018. The Basics of How GPS Works and an Activity to Try at Home. Legacy Vol 12 Issue 2 <https://www.noble.org/news/publications/legacy/2018/winter/the-basics-of-how-gps-works-and-an-activity-to-try-at-home/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Bushy Bluestem (Andropogon glomeratus). Oklahoma Farm & Ranch Issue Dec <http://okfronline.com/2018/12/bushy-bluestem-andropogon-glomeratus/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Hackberry (Celtis spp.). Oklahoma Farm & Ranch Issue Oct <http://okfronline.com/2018/09/grazing-oklahoma-western-ragwee/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Cat's Claw Sensitive Briar. Oklahoma Farm & Ranch Issue Jun <http://okfronline.com/2018/06/grazing-oklahoma-cats-claws-sensitive-briar/>.
- Proctor, Mike.** 2018. Grazing Oklahoma: Indian Paintbrush. Oklahoma Farm & Ranch Vol 2018 Issue May <http://okfronline.com/2018/05/grazing-oklahoma-indian-paintb.>
- Proctor, Mike.** 2018. Grazing Oklahoma: Eastern Red Cedar. Oklahoma Farm & Ranch Vol 2018 Issue Feb <http://okfronline.com/2018/02/grazing-oklahoma-eastern-red-cedar/>.
- Proctor, Mike.** 2016. Brush encroachment provides clues about soil health. AG News and Views <https://www.noble.org/globalassets/images/news/ag-news-and-views/2016/07/pdf/brush-encroachment-soil-health.pdf>.
- Moffet, Corey, Motal, Frank, Gaskamp, Josh, Proctor, Mike.** 2013. Mobile app aids prescribed burn management. AG News and Views Vol 2013 Issue 4 <https://www.noble.org/news/publications/ag-news-and-views/2013/april/mobile-app-aids-prescribed-burn-management/>.

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### Presentations

- Shimer, K., Jackson, V., Webb, S.L., Proctor, M.D.** 2021. Estimating occupancy of coyotes (*Canis latrans*) on rangelands using camera trap and acoustic data. Tri-Center Symposium, University of Central Oklahoma.
- Shimer, K., Jackson, V., Webb, S.L., Proctor, M.D.** 2021. Estimating occupancy of coyotes (*Canis latrans*) on rangelands using camera trap and acoustic data. Oklahoma Research Day, Cameron University.
- Shimer, K., Jackson, V., Webb, S.L., Proctor, M.D.** 2021. Estimating occupancy of coyotes (*Canis latrans*) on rangelands using camera trap and acoustic data. Oklahoma Chapter of The Wildlife Society Annual Meeting.
- Shimer, K., Jackson, V., Webb, S.L., Proctor, M.D.** 2021. Estimating occupancy of coyotes (*Canis latrans*) on rangelands using camera trap and acoustic data. Texas Society of Mammalogists Annual Meeting.
- Shimer, K., Jackson, V., Webb, S.L., Proctor, M.D.** 2021. Comparison of passive detection method in determining occupancy of coyotes in rangeland in southern Oklahoma. The Wildlife Society Annual Meeting.
- Grimsley, J.L., Webb, S.L., Proctor, M.D., Payne, D.B.** 2020. The FAA drone integration pilot program (IPP): implications for wildlife management and research. The Wildlife Society Annual Conference.
- Shimer, K., Jackson, V., Webb, S.L., Proctor, M.D.** 2020. Comparing detection methods of coyotes (*Canis latrans*) using camera trap and acoustic data in two native rangeland sites. Central Plains Society of Mammalogist Annual Meeting.
- Burton, Kathryn L., Midgley, Madison K., Webb, Stephen L., Proctor, Mike, Sledge, C., Mathewson, H.** 2019. Detection capabilities of bioacoustics monitors: using ARUs to improve survey protocol. American Fisheries Society and The Wildlife Society Joint Conference, Reno, Nevada.
- Burton, Kathryn L., Midgley, Madison K., Webb, Stephen L., Proctor, Mike, Sledge, C., Mathewson, H.** 2019. Detection Capabilities of Bioacoustic Monitors,. 55th Annual Meeting of the Texas Chapter of The Wildlife Society.
- Burton, Kathryn L., Midgley, Madison K., Webb, Stephen L., Proctor, Mike, Sledge, C., Mathewson, H.** 2019. Detection Capabilities of Bioacoustic Monitors. College of Environmental Science, Tarleton State University, Stephenville, Texas.
- Burton, K, Webb, Stephen, Proctor, Mike, Sledge, C., Mathewson, H.** 2019. Detection capabilities of bioacoustics monitors: using ARUs to improve survey protocol. Texas Statewide Quail Symposium, Abilene, Texas.

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### Journal Articles

- Proctor, Mike D.** 2020. Computing Skills for Biologists. The Journal of Wildlife Management Vol 85 Issue 1 Pages 187 <https://wildlife.onlinelibrary.wiley.com/doi/10.1002/jwmg.21938>.

**Proctor, Mike.** 2019. *How Plants Work: Form, Diversity, Survival*. Stephen Blackmore. 2018. Princeton University Press, Princeton, New Jersey, USA. 368 pp. \$35.00 hardcover. ISBN: 9780691177496. *The Journal of Wildlife Management* Vol 84 Issue 1 Pages 194 <http://doi.org/10.1002/jwmg.21773>.

**Proctor, Mike D.** 2016. *Weeds of North America*. Richard Dickinson and France Royer, editors. 2014 The University of Chicago Press, Chicago, Illinois, USA. 797 pp. \$35.00 paperback. ISBN: 978-0-226-07644-7. *The Journal of Wildlife Management* Vol 80 Issue 5 Pages 949–949 <http://dx.doi.org/10.1002/jwmg.1061>.

**Proctor, M.D., Nicholson, R.A.** 1994. *Gossypianthus lanuginosus* (Poir.) Moq. in A. DC. (Amaranthaceae) in Kansas. *Transactions Kansas Academy of Science* Vol 97 Issue 1-2 Pages 64-65

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## Reports

**Proctor, Mike.** 2009. City of Madill – Marshall County, OK. Water Standpipes and Associated Pipeline Construction, Summary of Baiting Away Efforts for the American Burying Beetle And Impact for Other Listed Species Environmental review prepared for USFWS and City of Madill, OK.

**Johnson, F.L., Proctor, M.D., Young, D.A., Schnell, G.D.** 1997. Floral inventory of Camp San Luis Obispo and Camp Roberts, California. Report to U.S. Army Construction Engineering Research Laboratories, Champaign, Illinois. Pages 90 Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., Benesh, D.L., Schnell, G.D.** 1997. Roadside Wildflower Survey For Oklahoma Department of Transportation. Oklahoma Biological Survey, Univ. of Okla., Norman, OK. In Oklahoma Prairie Passage. Phase I Final Report. Floral and Cultural Survey. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., McCarty, N.A., Estes, J.R.** 1996. Part 2. Floral Inventory. In Biological Survey of Vance Air Force Base, Oklahoma. Oklahoma Biological Survey, Univ of Okla, Norman, OK. G.D. Schnell, M.D. Roedel, and A.E. Hiott, Editors.

**Johnson, F.L., Proctor, M.D., McCarty, N.A., Benesh, D.L.** 1996. Biological Survey of Altus AFB, Oklahoma. Part 1. Floral Inventory. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., Benesh, D.L., Estes, J.R.** 1996. Floral Inventory of Camp Bullis, Texas. Oklahoma Biological Survey, Univ. of Okla., Norman, OK. Final Report to U.S. Army Construction Engineering Research Laboratories. Oklahoma Biological Survey, Univ of Okla, Norman, OK. Contract # DACA 88-93-D-0012.

**Johnson, F.L., Proctor, M.D., McCarty, N.A., Hoagland, B.W., Holmes, M.I., Brown, G.E., Browning, T.L., Benesh, D.L., Schnell, G.D.** 1995. Floral Inventory of Quantico Marine Base, Virginia. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., McCarty, N.A., Hoagland, B.W., Holmes, M.I., Browning, T.L., Benesh, D.L., Schnell, G.D.** 1995. Floral Inventory of Aberdeen Proving Grounds-Edgewood Arsenal, Maryland. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., McCarty, N.A., Hoagland, B.W., Benesh, D.L., Schnell, G.D.** 1995. Floral Inventory of Fort A.P. Hill, Virginia. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., Browning, T.L., Brown, G.E., Schnell, G.D.** 1995. Native Tallgrass Prairie Assessment/Management Plan, Tinker AFB, Oklahoma. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Proctor, M.D., Young, E.A., McCarty, N.A.** 1994. Floral Inventory of Camp Gruber, Oklahoma. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Proctor, M.D., Johnson, F.L., Schnell, G.D.** 1994. Wetland Survey of Ft. Chaffee, Arkansas. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Anderson, W.J., Keller, W.O., Proctor, M.D., Schnell, G.D.** 1993. Floral Inventory of Fort Campbell, Kentucky - Tennessee. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Allen, C.M., Proctor, M.D., Thompson, R.A., Schnell, G.D.** 1993. Floral Inventory of Fort Polk, Louisiana. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

**Johnson, F.L., Keller, W.O., Proctor, M.D., Schnell, G.D.** 1992. Fort Sill Vegetation Map. Oklahoma Biological Survey, Univ of Okla, Norman, OK.

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## Thesis

**Proctor, Mike D.** 1993. *The Vegetation of Slate Creek Wetland*. Fort Hays State University.

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