

DISTRICT COURT LA PLATA COUNTY COLORADO 1060 EAST SECOND AVENUE DURANGO COLORADO 81301	<div data-bbox="1047 126 1421 493" style="border: 1px solid black; padding: 5px; text-align: center;"> ORIGINAL FILED / REC'D IN COMBINED COURT LA PLATA COUNTY, COLORADO MAY 24 2019 DEPUTY CLERK </div> <p style="text-align: center;">σ COURT USE ONLY σ</p>
PEOPLE OF THE STATE OF COLORADO PLAINTIFF VS. MARK ALLEN REDWINE	
Megan Ring, Colorado State Public Defender Justin Bogan #33827 John Moran #36019 Deputy Public Defender 175 Mercado Street, Suite 250 Durango, Colorado 81301	<p>Case No. 17CR343</p> <p>Division : 1</p>
<p>NOTICE OF ENDORSEMENT</p> <p>[D124]</p> <p>[PUBLIC ACCESS]</p>	

MARK ALLEN REDWINE, through counsel, respectfully informs this Court and the prosecution of the following witness counsel will seek to endorse as an expert witness in the areas addressed in her attached summary of proposed expert testimony and her curriculum vitae:

- Mary E. Cablk, Ph.D
 Division of Earth and Ecosystem Sciences, Desert Research Institute
 2215 Raggio Parkway
 Reno, NV 89512

Respectfully submitted,

/s/ John Moran
 John Moran, No. 36019
 Deputy State Public Defender

/s/ Justin Bogan
Justin Bogan, No. 33827
Deputy State Public Defender
Dated: May 24, 2019

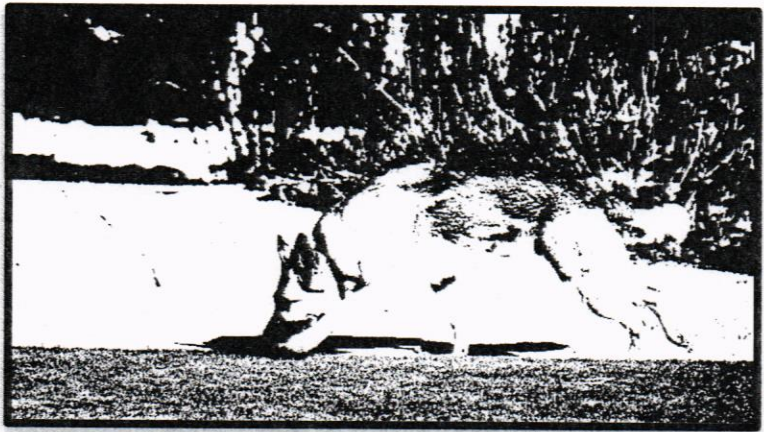
Certificate of Service
I hereby certify:
I served the foregoing document by e-filing
same to all opposing counsel of record.
/s/ Justin Bogan /s/ John Moran



Expert Opinion

Prepared by
Mary E. Cablk, Ph.D.

May 22, 2019



Division of Earth and Ecosystem Sciences,
Desert Research Institute

Prepared for
The Innocence Project, Inc.
and
The Colorado Public Defender's Office

Reliability of canines for residual odor

[REDACTED]

[REDACTED]

[REDACTED]

1. Odor and Residual Odor

a. Definitions

[REDACTED]

[REDACTED]

b. Canine ability to detect residual odor

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

2. Training and Standards

[REDACTED]

[REDACTED]

[REDACTED]

[Redacted]

a. Best Practices

[Redacted]

[Redacted]

[Redacted]

b. Protocols to minimize or prevent bias

[Redacted]

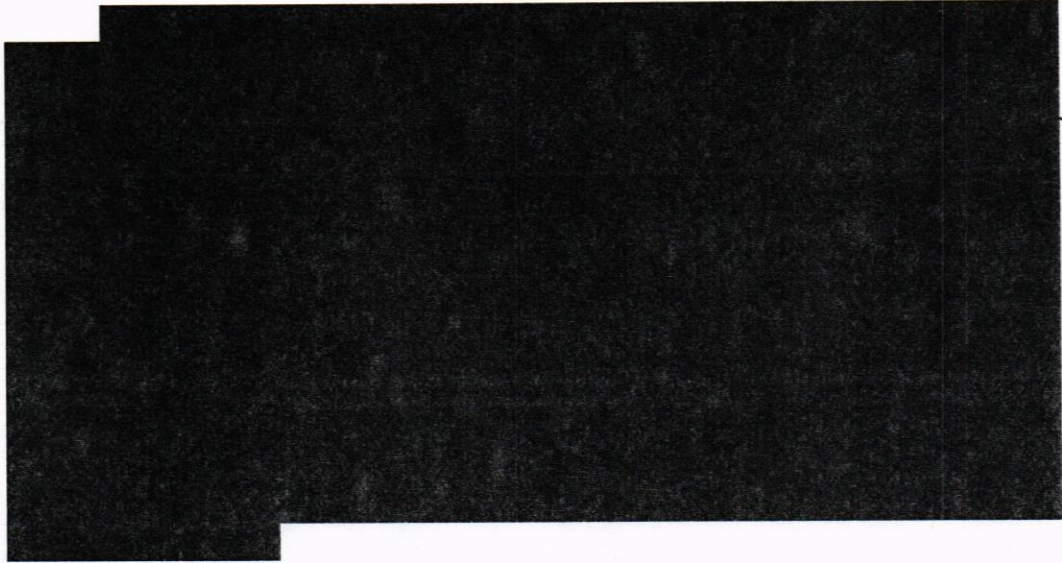
[REDACTED]

[REDACTED]

c. Ancillary odors and generalization in target odors

[REDACTED]

[REDACTED]

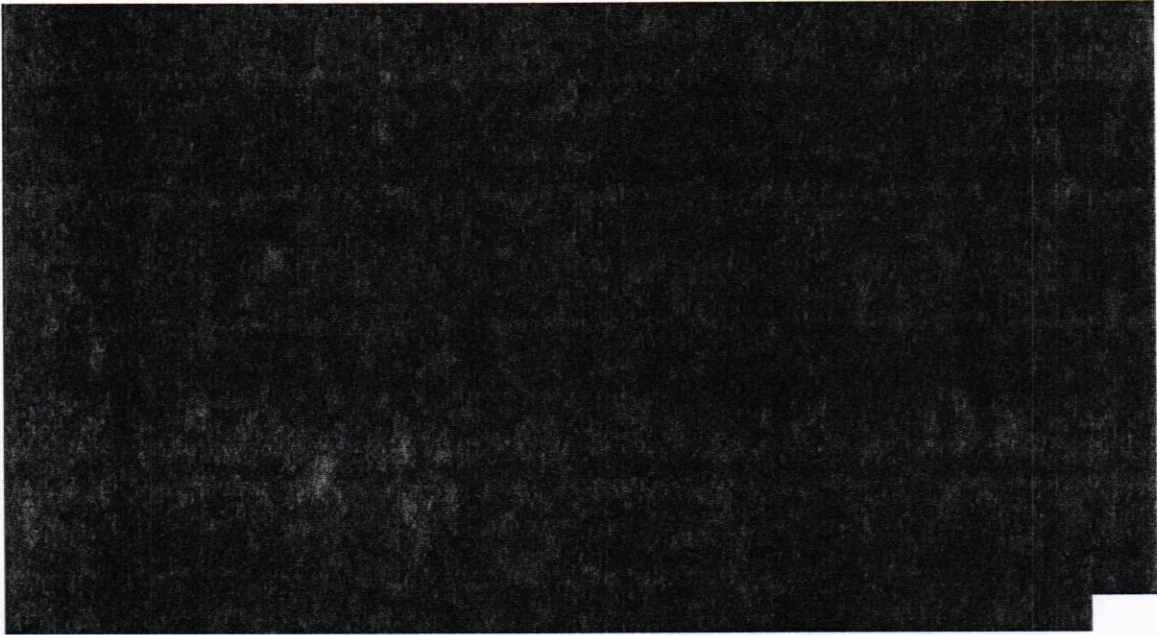


- d. What determines reliability of a canine to detect residual odor





3. Trained response thresholds



4. Cross-trained vs Single Purpose Canines



CURRICULUM VITAE

Mary E. Cablk, Ph.D.

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520 Beckwourth Drive
Reno, NV 89506

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Email: topdog@detectionsscience.com
www.detectionsscience.com
www.dri.edu/mary-cablk-research

Professional Preparation

Virginia Polytechnic Institute and State University	Biology	B.S.	1989
Duke University, School of Forestry & Environmental Studies	Resource Ecology	M.E.M.	1991
Oregon State University, College of Forestry	Forest Resources	Ph.D.	1997

Professional Appointments

2017 – present Owner, Detection Science Solutions LLC
2013 – present Adjunct faculty, Department of Anthropology, University of Nevada Reno
2013 – present Graduate faculty standing, University of Nevada Reno
2006 – present Associate Research Professor, Division of Earth and Ecosystem Sciences, Desert Research Institute (DRI), Nevada System of Higher Education (NSHE) Reno, Nevada
2000-2006 Assistant Research Professor, DEES, DRI, NSHE Reno, NV
1999-2000 Postdoctoral Associate, Division of Earth and Ecosystem Sciences, Desert Research Institute, Reno, Nevada
1997-1999 National Research Council Postdoctoral Associate, Western Ecology Division, US Environmental Protection Agency National Health and Environmental Effects Laboratory, Corvallis, Oregon

Research Programs

Detection technology; Canine detection capability; Visualization; Remote sensing; Spatial analysis and modeling.

Director, Desert-tortoise K9 (DTK9) Program 2003-2011.

Expert Witness: Multiple states, K9 detection, applied science.

K9 affiliations:

- Humboldt County (NV) Search and Rescue K9 Squadron (2018-present)
- CA POST instructor (2018-present): Winter Search and Rescue (40 hr course)
- CA Governor's Office of Emergency Services (2015-present): Agent for FEMA/NIMS standards
- NV POST K9 evaluator and instructor (2014-present): HRD, water, avalanche, area/wilderness
- Washoe County Sheriff Office Search and Recovery K9 Unit (Lead) (2014-present)
- Northern Nevada Disaster Victim Recovery Team, Washoe Co. Office of the Coroner, (2013-present)
- Nevada POST K9 Standards Working Group (2013-present)
- Lyon County Sheriff Office Human Remains Detection, Land and Water K9 Team (2012-present)
- Douglas County Sheriff Office Search and Rescue (support, ~2003 – present)
- Elko County Sheriff Office Search and Rescue (support, ~2011-present)
- Lander County Sheriff Office Search and Rescue (2005-present)
- Handler/Board of Directors, Wilderness Finders, Inc. (WEOF) (2000 – present/2003-present)
- Kenyon International (2011-2013)

- K9 Team Leader and K9 coordinator, Lassen-Volcanic National Park (“Volcanines”) (2006 - present)
- K9 Handler, Yosemite Search and Rescue (YODOGS) (2005-2009)
- Backcountry Team Leader, WCSO Hasty Team (2000-2008)

Law Enforcement Affiliations:

- Auxiliary Deputy, Lyon County Sheriff Office, Nevada
- Auxiliary Deputy, Washoe County Sheriff Office, Nevada
- Search and Rescue Support (K9 handler), Douglas County, Nevada
- Search and Rescue (K9 handler), Humboldt County, Nevada

Professional Society Membership and Technical Training

- American Academy of Forensic Sciences (2018-present)
- Viewing Research Through Different Lenses: How to Achieve Success in Court, American Academy of Forensic Sciences Workshop. New Orleans, LA. (2017)
- Direction and Control of the Search Function (2016), State of California POST
- Nevada POST K9 Evaluator Course (2015), State of Nevada POST
- Serial Murder (2014) professional development course, FBI Behavioral Analysis Unit
- Fatal Fire Investigation (2014), International Association of Arson Investigators, NV POST credited (16 hours).
- Human Remains Detector Dogs (2012), William R. Maples Center for Forensic Medicine at UFL and ASPCA
- Voting member, National Association of Search and Rescue (2011-2012)
- Associate Member, North American Police Work Dog Association (2010-2011)
- American Academy of Forensic Science workshop: Taphonomy of bone destruction; Seattle, WA. (2010)
- Forensic investigation of human remains from armed conflicts and catastrophes. American Academy of Forensic Science workshop. Seattle, WA. (2010)
- American Society of Environmental History
- Society for Conservation GIS
- The Wildlife Society
- American Association of Geographers
- American Geophysical Union
- Ecological Society of America
- Federal, State of Nevada, US Army and University permits for *Gopherus agassizii*
- Small tortoise transmitter attachment/removal (2007); Subcarapacial tortoise bleeding (2006)
- Desert Tortoise Surveying, Monitoring, and Handling Techniques Workshop November 8-9th, 2003, Ridgecrest, CA
- National Avalanche School (2004), 40-hour classroom lecture plus 3-day field evaluation
- Secretary/Treasurer (elected) American Society of Photogrammetry Remote Sensing Columbia Region Chapter (1998)
- Xi Sigma Pi, Forestry Honor Society, OSU (1996)
- Phi Sigma, Biology Honor Society, VPI & SU (1988)

International K9 Consultation:

- 2011 Costa Rica – K9 recovery and jungle training with Costa Rica Red Cross and Jonni Joyce International
- 2009 Norway – (Bergen) invited by Geneva International Centre for Humanitarian Demining to present *Quantifying detection dog team capability in the field deployment setting.*

- 2004 Turkmenistan – (Ashgabat) invited by U.S. State Department to instruct Turkmenistan government on capabilities of K9 teams, specifically in the disaster setting.
- 2004 Tanzania – (Morogoro) invited by U.S. Army Research Office to attend workshop on landmine sniffer ‘animals’ and present her DOD funded K9 detection research program.

Service on Advisory/Research Review Committees:

- 2018 Peer reviewer: to Journal of Archaeological Method and Theory; PLOS ONE
- 2017 Peer reviewer: Remote Sensing Journal.
- 2014 Peer reviewer: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing; Sensors
- 2013 Peer reviewer: IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing; International Conference on Military Geosciences, US Department of Energy.
- 2011 Peer reviewer: J Arid Environments, Southeastern Geographer.
- 2010 Peer reviewer: Sensors, J Env Mgmt, IEEE Journal of Selected Topics in Earth Observations and Remote Sensing.
- 2009 Peer reviewer: Army Research Office, Wildlife Research, Landscape and Urban Planning, J Veterinary Behavior.
- 2008 Peer reviewer: Army Research Office; Land Degradation and Development.
- 2007 Peer reviewer: IALC, J Vegetation Science, US Fish and Wildlife Service Non-invasive species program 2007, Canadian J Remote Sensing, Herpetological Review, International J Remote Sensing
- 2006 Peer reviewer: US Army Research Office, Canadian J Remote Sensing, Photogrammetric Engineering and Remote Sensing
- 2005 Peer reviewer: Journal of Environmental Informatics, Brief the Science Advisory Council to the Desert Tortoise Recovery Assessment Team, Southern Nevada Public Lands Management Act, US Army Research Office
- Invited as ambassador to consult to Turkmenistan Government/Military on developing working dog programs, US State Department (2005, 2006)
- Board of Directors and Grants review committee, The Access Fund (National non-profit organization) (2002-2005)
- 2004 Peer reviewer: US Army Research Office, Department of Defense SERDP Program, International Journal of Remote Sensing, Clark County Multiple Species Habitat Conservation Plan, Southwestern Naturalist
- 2003 Peer reviewer: US Army Research Office, Journal Arid Environments, Ecology, International Arid Lands Consortium
- Program Committee - Applied Geologic Remote Sensing 14th International Conference (2000)
- 2000 Peer reviewer: U.S. Army Corps of Engineers Engineer Research and Development Center (ERDC), FY01 Environmental Quality Basic Research

Teaching

- Contract training/program development through Detection Science Solutions LLC
 - Trailing and HRD customized courses
 - Best practices for K9 handlers
 - Integrated trailing and HRD
 - Direction and Control of the Winter Search Function (Avalanche K9 resources). CA POST Course. 2018-present
 - Blind and Double blind training
 - Sheriff Office K9 handler training programs HRD

- Blind and Double Blind Training. Josephine County Sheriff Office (OR) Search and Rescue. April 8-10, 2016.
- Introduction to water recovery canine training. Josephine County Sheriff Office (OR) Search and Rescue. April 8-10, 2016.
- Double blind training for cadaver dog handlers. California Emergency Management Agency SAREX conference. Silver Lake, Amador County, CA. September 11-13, 2015.
- The Oso Land Slide: A Case Study. September. California Emergency Management Agency SAREX conference. Silver Lake, Amador County, CA. September 11-13, 2015.
- Double blind training for Human Remains Detection Dog Teams. California Emergency Management Agency SAREX conference. Big Basin, CA. September 6-8, 2013.
- Invited guest lecture UC Davis to "Canine Behavior" class July 23, 2013.
- *Human Remains Detection K9 Summit*. Desert Research Institute, Reno, NV: 2009-10.
- SARCON (State of Nevada Department of Emergency Management SAR Conference):
2010: Co-organizer of K9 instruction track and instructor for K9 cadaver track.
2007: Search and Rescue Dogs 101
2004: Lessons from the National Avalanche School
2003: An avalanche recovery at Mt. Rose Ski Area
- *Scent Theory*. December 2007. Regional Training Center, Reno, NV. Special seminar to Sacramento Task Force (FEMA) and WCSO SAR dog teams.
- *Wilderness Survival*. Spring 2006. Truckee Meadows Community College. 3-credit lecture.
- Research Education for Undergraduates (REU) advisor, UCWMRS (2002, 2003)
- Developed Spatial Analysis Supercourse for undergraduates through University of California White Mountain Research Station
- Workshop on Digital Change Detection Methodologies for Natural Resource Management and Research, U. of New South Wales, Australia (1999)
- Designed Introductory Remote Sensing Course and Workbook for Central Oregon Community College, Bend, OR (1998)

Student/Postdoctoral Advising

Amanda Williams. 2014 –2016. PhD student in anthropology at UNR. Creating a classification system for quantifying burned human remains.

Jotham Ziffer-Berger. 2008-2009. Postdoctoral Research funded by the International Arid Lands Consortium. Research Project: Pine expansion in arid land: fire effects on safe site abundance.

Anitra Sapula. 2008-2009. Masters Research Thesis support: Distinguishing weathered tool marks on

bone: the taphonomic effects of surface exposure in semi-arid conditions within the American Great Basin Desert of Northwestern Nevada (Sagebrush Steppe and Piñon-Juniper Woodland). University of Bradford, UK.

Erin Szlagowski. 2011. UNR Undergraduate Honors student in biochemistry, mentoring resulted in peer-review publication in leading forensic science journal.

Peer-Review Publications

Cablk, M.E., S. Clark, C. Valentin et al. *in prep*. A certification standard for wildlife detection dogs: Assessing safety and capability using Mojave desert tortoise detection dogs as an example. For submission to *Journal of Wildlife Management*.

Norton, R., M.E. Cablk, B. Ramsey, K. Smith, S. Bacon, S. Ostrowski, J. Wright, and S. Rodning. 2018. Defending against agroterrorism: Modeling Pathogen Dispersion Pathways. *Homeland Defense & Security Information Analysis (HDIAC) Journal*, 5(1):23-27.

- Ziffer-Berger, J; P.J. Weisberg; **M.E. Cablk**; Y. Moshe; Y. Osem. 2017. Shrubs facilitate pine colonization by controlling seed predation in dry Mediterranean dwarf shrublands. *Journal of Arid Environments*, 147:34-29.
- Ziffer-Berger, J., P.J. Weisberg, **M.E. Cablk** and Y. Osem. 2014. Spatial patterns provide support for the stress-gradient hypothesis over a range-wide aridity gradient. *Journal of Arid Environments*, 102:27-33.
- Cablk, M.E., E.E. Szelagowski, and J.C. Sagebiel. 2012. Characterization of the volatile organic compounds present in the headspace of decomposing animal remains, and compared with human remains. *Forensic Science International*. 220:118-125.
- Cablk, M.E. and J.S. Sagebiel. 2011. Field capability of dogs to locate human teeth. *Journal of Forensic Sciences*. 56(4):1018-1024.
- Heaton, J.S., **M.E. Cablk**, K.E. Nussear, T.C. Esque, P.A. Medica, J.C. Sagebiel, and S.S. Francis. 2008. Comparison of human versus wildlife detector dog investigator effects. *Southwestern Naturalist* 53(4):472-479.
- Cablk, M.E., Sagebiel, J.C., Heaton, J.S., and C. Valentin. 2008. Olfaction-based detection distance: A quantitative analysis of how far away dogs detect tortoise odor and follow it to source. *Sensors*. 8(4):2208-2222.
- Nussear, K.E., T.C. Esque, J.S. Heaton, **M.E. Cablk**, K.K. Drake, C. Valentin, J.L. Yee, and P.A. Medica. 2008. Are wildlife detector dogs or people better at finding tortoises? *Herpetological Conservation and Biology*. 3(1):103-115.
- Raumann, C. and **M.E. Cablk**. 2008. Land-use/cover change in the Lake Tahoe Basin, California and Nevada, USA, 1940-2002. *Forest Ecology and Management*. 255:3424-3439.
- Cablk, M.E. and J.S. Heaton. 2006. Accuracy and reliability of dogs in surveying for desert tortoise *Gopherus agassizii*. *Ecological Applications*. 16(5):1926-1935.
- Minor, T. and **M.E. Cablk**. 2004. Estimation of Impervious Cover in the Lake Tahoe Basin Using Remote Sensing and Geographic Information Systems Data Integration. *Journal of Nevada Water Resources Association*. 1(1):58-75.
- Cablk, M.E. and T. Minor, 2003. Detecting and discriminating impervious cover with high-resolution IKONOS data using principal component analysis and morphological operators. *International Journal of Remote Sensing*. 24(23): 4627-4645.
- Hunter, L.M., M. de J. Gonzalez, M. Stevenson, K.S. Karish, R. Toth, T.C Edwards, R.J. Lillieholm, and **M. Cablk**, 2003. Population and land use change in the California Mojave: Natural habitat implications of alternative futures. *Population Research and Policy Review*. 22:373-397.
- Cablk, M.E., W.K. Michener, B. Kjerfve, and J. Jensen. 1994. Assessing Hurricane-Hugo related forest damage using Landsat TM data. *Geocarto International*. 9:15-24.

Peer-reviewed Reports

- Miller, J., V. Etyemezian, R. Shillito, **M.E. Cablk**, L.K. Fenstermaker, and D.S. Shafer. 2013. Monitoring Soil Erosion of a Burn Site in the Central Basin and Range Ecoregion: Final Report for the Gleason Fire Site, Nevada. Final Report to the Nevada Site Office, National Nuclear Security Administration, US Department of Energy. DOE/NV/0000939-14. DRI Report#45254.
- Miller, J., **M.E. Cablk**, V. Etyemezian, R. Shillito, and D. Shafer. 2013. Monitoring Soil Erosion on a Burned Site in the Mojave-Great Basin Transition Zone: Final Report for the Jacob Fire Site. Final

Report to the Nevada Site Office, National Nuclear Security Administration, US Department of Energy. DOE/NV/0000939-13. DRI Report #45253.

Hershey R.L., **M.E. Cablk**, K. LeFebre, and L. Fenstermaker. 2013. Water-Chemistry Evolution and Modeling of Radionuclide Sorption and Cation Exchange during Inundation of Frenchman Flat Playa. Desert Research Institute: Reno, NV, DOE/NA0000939-10; DRI Publication No. 45252.

Cablk, M.E. and R. Harmon. 2011. Validation and Development of a Certification Program for Using K9s to Survey Desert Tortoises. Final Report to DOD Environmental Security Technology Certification Program. RC-200609. 162 p.

Cablk, M.E. and R. Harmon. 2011. Cost and Performance Report: RC-200609. Report to DOD Environmental Security Technology Certification Program. RC-200609. 91 p.

Miller, J.J., R.H. French, S.A. Mizell, **M.E. Cablk**, and C.B. Kratt. 2011. Using Doppler Radar Precipitation Measurements to Enhance Estimates of Playa Inundation. American Society of Civil Engineers - Environmental and Water Resources Institute, World Environmental and Water Resources Congress 2011, May 22-26, 2011, Palm Springs, California.

R.L. Jasoni, Thomas, J.M., **M.E. Cablk**, D. Decker, B. Lyles, J. Arnone, and W.H. Albright. 2009. Evapotranspiration in Smoke Creek Desert, Nevada. Final report to SEMPRA Generation. DRI report #41224R. April 2009.

Cablk, M.E. and C. Kratt. 2007. A methodology for mapping shrub canopy cover in the Great Basin Desert using high spatial resolution satellite imagery. Desert Research Institute publication #41236. July 2007.

Zhu, J. M.H. Young and **M.E. Cablk**. 2007. Uncertainty analysis of estimates of ground- water discharge by evapotranspiration for the BARCAS study area. Desert Research Institute Technical Report #41234, June 2007.

Sharpe, S.E., **M.E. Cablk**, and J.M. Thomas, 2007. The Walker Basin, Nevada and California: Physical Environment, Hydrology, and Biology. Desert Research Institute Technical Report #41231, May 2007.

Albright, W.H., R.L. Jasoni, **M.E. Cablk**, J.M. Thomas, J., D. Decker, and A. Arnone. 2006. Groundwater Evapotranspiration in Smoke Creek Desert, Nevada. Final report to SEMPRA Generation. DRI report #41224. March 17, 2006.

Reports

Cablk, M.E., J.C. Sagebiel, and M. McDaniel. 2016. Analytical Chemistry Analysis of Bat Guano: An Investigation into Species-Specific Bat Detection Via Olfaction. Final Report to US Department of the Interior, Fish and Wildlife Service Kentucky Field Office. 51pp.

Cablk, M.E. 2016. Line of Sight/Visibility Analysis for Ascension Island Radar and Wind Towers. Submitted to Technical Advisor Encroachment and Sustainability Senior Scientific Analyst, Department of the Air Force. 10pp.

Fenstermaker, L.F., **Cablk, M. E.**, Chapman, J., Green, M. C., de Soyza, A., 2013: Recommended Core and Supplemental Environmental Monitoring Methods for Arid Land BP Installations, Prepared for BP International.

Cablk, M.E., K.N. Nussear, and T.C. Esque. 2007. Desert tortoise surveys on the Precision Impact Range Area October 2006, Edwards Air Force Base, California. Final report to Edwards AFB. 22 pp.

Cablk, M.E. and L.M. Perlow. 2006. A classification system for impervious cover in the Lake Tahoe Basin. Final report submitted to the State of Nevada Water Resources Research Institute, February 28, 2006.

- Cablk, M.E. 2006. Protecting the threatened desert tortoise: A plan for primary survey, management and monitoring in Parashant National Monument and Grand Canyon National Park. Final report to Grand Canyon/Parashant National Park.
- Cablk, M.E. and J.S. Heaton. 2005. Efficacy and reliability of dogs for surveying desert tortoises: Results from the DT-K9 trials March 28-April 15, 2004 Desert Tortoise Conservation Center – Las Vegas, NV. *Prepared for:* University of Redlands. Task order# 121220-02-02A. 57p.
- Cablk, M.E., J.S. Heaton, and J.C. Sagebiel. 2004. Risk of attracting predators from human and human-dog team wildlife surveys. *Prepared for:* Marine Air Ground Task Force Training Command, Natural Resources and Environmental Affairs Division. Contract #W911NF-04-1-0279. 31p.
- Young, M., W. Albright, W. Zachritz, D. Shafer, K. Pohlmann, **M. Cablk**, S. Zitzer, and E. McDonald. 2004. Technical approach for designing alternative covers at Edwards Air Force Base, California. Desert Research Institute publication No. 41192. Prepared for Air Force Flight Test Center, Environmental Management Directorate, Edwards Air Force Base, California. Contract#DACA05-02-C-0009.
- Cablk, M.E. 2003. Baseline and initial monitoring assessment of *Martes americana*, the American Marten, at Heavenly Ski Resort, Lake Tahoe, California. U.S. Forest Service, Lake Tahoe Basin Management Unit. 87 p.
- Cablk, M.E., W. Langford, and A. Panorska. 2003. Alternative Future Scenarios: Development of a modeling information system. Final Report to DoD: Strategic Environmental Research and Development Program. Report M67399-00-C-0005. 115 p.
- Minor, T. and **M.E. Cablk**. 2003. Estimation of hard impervious cover in the Lake Tahoe Basin using Remote Sensing and Geographic Information Systems. Final report to the Tahoe Regional Planning Agency. 32p.
- Cablk, M.E. and J.S. Heaton. 2002. Mojave Fringe-Toed Lizard surveys at the Marine Corps Air Ground Combat Center at Twenty-nine Palms, California and nearby lands administered by the Bureau of Land Management. California: Marine Corps Air Ground Combat Center. Report M67399-00-C-0005. 115 p.
- Cablk, M.E. 2002. Impacts of development in the Coachella Valley on Fringe-Toed Lizards and the related implications to Joshua Tree National Park. Final report to Joshua Tree National Park. 46 pp.
- McDonald, E., J. Gilles, R. Keisler, and **M. Cablk**. 2001. Ft. Irwin dust emissions: Meteorology and Modeling. Final report to Commander NTC and Fort Irwin ITAM Program. September 18, 2001. 64 pp.
- Steinitz, C., Anderson, R., Arias, H., Bassett, S., **Cablk, M.**, Flaxman, M., Goode, T., Lozar, R., Maddock, T., Mouat, D., Rose, W., Peiser, R. and Shearer, A.: 2000, 'Summary Report: Alternative Futures for the Upper San Pedro River Basin Arizona, U.S.A. and Sonora, Mexico', Harvard University, Graduate School of Design, Cambridge, MA, USA, p. 19.
- Stoms, D.M., **M.E. Cablk**, W.H. Hargrove, L.L. Master. 1998. Comparisons across taxa of biophysical predictors of species richness. *In* Acquisitions and evaluation of data sets for comparative assessment of risk to biodiversity on a continental scale: Threats to biodiversity. D.M. Stoms, W.A. Kuhn, and F.W. Davis. Final report to the US Environmental Protection Agency. 138 pp.
http://legacy.biogeog.ucsb.edu/projects/epa/epa_rpt.html

Book Chapters

- Cablk, M.E., J.J. Miller, and S.A. Mizell. 2016. Comparing playa inundation estimates from Landsat and LiDAR data to a Doppler radar-based hydrologic model. In E. McDonald, and T. Bullard, eds., *Military Geosciences and Desert Warfare: Advances in Military Geosciences*. Springer Publishing.

pp. 153-167.

Cablk, M.E., 2015, Experiencing nature in militarized landscapes: If a bomb drops in the desert do we still call it wilderness? in Harmon, R.S., Baker, S., and McDonald, E.V., eds., *Military Geosciences in the Twenty-First Century: Geological Society of America Reviews in Engineering Geology*, v. XXII, 22:205-215.

Cablk, M.E., D. White, and A.R. Kiester. 2002. Assessment of spatial autocorrelation in empirical models in ecology. In M. Scott, P. Heglund, M. Morrison, M., J. Haufler, M. Rafael, W. Wall, and F. Samson, eds., *Predicting Species Occurrences: Issues of Accuracy and Scale*. Island Press, Washington, DC.

Other publications

Cablk, M.E. and C. Salisbury. 2011. Avalanche Dog Teams: Technical Experts in a Dangerous Environment. *K9-Cop Magazine*. Dec/Jan issue.

Panel moderator:

Panel Moderator: *K9-Science Panel Discussion for SAR K9 Handlers*. J.C. Sagebiel, L. Lit, M.E. Cablk. National Association of Search and Rescue. 2011 Annual Conference. 2-4 June 2011, Sparks, NV.

Panel Chair for Session *Bases and Battlefields: Historical and Geographical Approaches to Military Landscapes*. American Society of Environmental History Conference. Phoenix, AZ. April 12-17, 2011.

Presentations (Invited):

Cablk, M.E. Seeing is believing. *Science Distilled*, Reno, NV. March 20, 2018. (Public speaking engagement on science of K9 perception and attention)

Cablk, M.E. Wildfires in a Developed Matrix: The Butte and Valley Fires. DRI Wildland Fire Science Center Inaugural Meeting. November 13, 2015.

Cablk, M.E. Double blind training for cadaver dog handlers. Little Basin, CA. State of California Search and Rescue Conference. September 6-8, 2013.

Cablk, M.E. The Mojave Desert Tortoise: Harbinger or beacon of the western US deserts? School of Forestry and Wildlife Science Fall 2012 Seminar Series. Auburn University, AL. October 9, 2012.

Cablk, M.E. Old wives tails and SAR: how to improve your credibility as a handler. State of California Search and Rescue Conference. Coloma, CA. September 7-9, 2012.

Cablk, M.E. Military wilderness: If a bomb drops in the desert do we still call it wilderness? American Society of Environmental History Conference. Phoenix, AZ. April 12-17, 2011.

Cablk, M.E. Integrating GIS with field methods to establish use patterns of the American marten at a major American ski destination. Invited seminar at the Volcani Institute, Agricultural Research Organization, Bet Dagan, Israel. March 22, 2010.

Cablk, M.E. Experiencing nature in militarized landscapes: If a bomb drops in the desert do we still call it wilderness? American Association of Geographers Annual Meeting. March 22-27, 2009. Las Vegas, Nevada.

Cablk, M.E. Experiencing nature in militarized landscapes: If a bomb drops in the desert do we still call it wilderness? University of Nevada Reno Literature and Environment Colloquium. March 27, 2009. Reno, NV.

- Cablk, M.E. Militarized Landscapes Conference. Experiencing nature in military landscapes: If a bomb drops on the desert do we still call it 'wilderness'? University of Bristol, Bristol, England. 3-6 September 2008.
- Cablk, M.E. Quantifying detection dog team capability in the field deployment setting. in *Odour detection by animals: Research and Practice*. Ulven Camp, Oslo, Norway, 16-20 June 2008.
- Cablk, M.E., J.S. Heaton, K.E. Nussear, T.C. Esque. Using dogs to find small desert tortoises: an update of the DTK9 Program 2006 field effort. 32nd Desert Tortoise Council Symposium. February 23-25, 2007. Las Vegas, NV.
- Cablk, M.E. Working with Nature: Dogs and Tortoises. Native American Land Conservancy Annual Conference. February 8-10, 2007. El Cajon, CA.
- Cablk, M.E. Stress in Wildlife: The American Marten at Heavenly Ski Area. Western Occupational Health Conference, September 14-16, 2006, Incline Village, NV.
- Cablk, M.E. and J.S. Heaton. 2006. The Desert Tortoise K9 Program. Desert Tortoise Council Meeting. February 19, 2006. Tucson, Arizona.
- Cablk, M.E. and J.S. Heaton. 2005. Using dogs to find desert tortoises. Desert Tortoise Science Advisory Council. May 16, 2005. Reno, NV.
- Cablk, M.E. and J.S. Heaton. 2005. Using K9s to find desert tortoises: The DTK9 Program. 4th National Detector Dog Conference. April 28-May 1, 2005. Auburn University College of Veterinary Medicine, Auburn, Alabama.
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