

Michelle Cloud-Hughes
Desert Solitaire Botany and Ecological Restoration
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Education:

B.S. Biology with an emphasis in Ecology, *cum laude*, May 1998, San Diego State University, San Diego, CA

Botany Experience:

Subcontractor

- Aspen Environmental Group¹
April 2016 – Present
 - US Gypsum rare plant survey
 - Coachella milkvetch survey
- EnviroPlus Consulting²
June 2015 – July 2015
 - Rare plant surveys, Southern California Edison, West of Devers Upgrade Project
- SummitWest Environmental, Inc.³
April 2015 – June 2015
 - Rare plant surveys on Tejon Ranch
- ECorp Consulting, Inc.⁴
June 2014 -- Present
 - BLM Rare Plant Habitat Suitability Modeling report and surveys
- Apex Contracting and Consulting, Inc.⁵
June 2013 – Present
 - Surveys, mapping, and reporting for *Castela emoryi* at Marine Corps Air Ground Combat Center
- Southwestern Botanical Research⁶
May 2011 - Present
 - Multiple rare plant research, surveys, and reporting
 - Surveys, measurements, documentation, statistical analysis, and publication of a new California *Cylindropuntia* species (see publications below)
 - Southwestern regional studies of morphological and genetic variation in *Cylindropuntia*, *Echinocereus*, *Opuntia*, *Grusonia*, and *Pediocactus*
 - Herbaria studies
 - Common garden studies in the Cactaceae
- Ironwood Consulting, Inc.⁷
April 2011 - Present
 - Vegetation Resource Lead Botanist, Silver State South, Stateline, and McCoy Solar Projects, July 2013-Present
 - Desert Sunlight construction monitoring and tortoise clearance surveys, August-September 2013
 - Quartzsite rare plant surveys, March 2013

- Copper Mountain botanical surveys, April 2011
- Alice Karl⁸ & Associates
October 2011 - Present
 - Johnson Valley/Marine Corps Air Ground Combat Center rare plant survey, March 2014
 - Palen Solar rare plant survey, September 2013
 - Blythe Solar rare plant survey, August-September 2012
 - McCoy Solar rare plant survey, October 2011
- URS Corporation⁹
 - Sonoran West rare plant survey, September – October 2011, March 2012, and September – October 2012
 - Rio Mesa rare plant survey, March – May 2011, March 2012, and September 2012
 - Calico Solar botanical surveys, April 2010 – May 2010
- Ecosphere Environmental Services¹⁰
 - Navajo Range Vegetation Assessment, May-August 2012
- GANDA
 - Hidden Hills Ranch rare plant survey, May 2011
- Sundance Biological Consulting
 - Ivanpah Solar Energy Generating System vegetation assessment, March 2011 and April 2012
- EDAW, Inc.
 - Vernal pool surveys, Ramona, CA, April 2002

Botanist

Soil Ecology and Restoration Group¹¹ / San Diego State University Research Foundation
January 2001 – December 2014

Ecological Restoration Experience:

Subcontractor

- Antelope Valley Resource Conservation District¹²
November 2011 – Present
Native shrub cuttings collection for revegetation of the Barren Ridge Renewable Transmission Project in the Angeles National Forest
Native seed collection for mitigation/revegetation of Caltrans State Route 138 Widening Project
- Apex Contracting and Consulting, Inc.⁵
June 2013 – Present
Native seed collection for mitigation/revegetation
Supervisor for non-native plant removal crew at San Clemente Island
- Dustbusters Consulting Group¹²
October 2011 - Present
Vegetation Specialist

Project Manager

Soil Ecology and Restoration Group / San Diego State University Research Foundation,
2003 - 2014¹¹

- Naval Base Point Loma
September 2006 – December 2014
Native Habitat Enhancement for Orcutt's Spineflower (*Chorizanthe orcuttiana*),
- Antelope Valley Dustbusters
October 2006 - 2011
Revegetation Methods for the Control of Dust from Arid/Desert Soil Disturbances in the Antelope Valley
- U.S. Army National Training Center, Fort Irwin
January 2003 – 2010
Multiple revegetation and erosion control projects
- Defense Fuel Support Point, San Pedro, CA
October 2006 – July 2008
Coastal Sage Scrub Habitat Development Project in Support of the Palos Verdes Blue Butterfly (*Glaucopsyche lygdamus* subsp. *palosverdensis*)
- AMEC Earth & Environmental
January 2006 – January 2007
Mitigation for the Coachella Canal Lining Project at Dos Palmas Preserve
- Naval Base San Diego Mission Gorge Recreation Facility, San Diego, CA
October 2006 – October 2011
Vegetation Management Plan Author
- Naval Base San Diego Mission Gorge Recreation Facility, San Diego, CA
October 2006 – 2011
Erosion Management Plan Author

Research Assistant

Soil Ecology and Restoration Group, San Diego State University Research Foundation
April 1997 - January 2003

Publications

- Baker, M.A. and M.A. Cloud-Hughes. 2014. *Cylindropuntia chuckwallensis* (Cactaceae): A new species from Riverside and Imperial Counties, California. *Madroño* 61(2): 231-243.
- Cloud-Hughes, M.A. and M.A. Baker. 2014. Noteworthy Collection, New Mexico: *Hexalectris colemanii* (Catling) A.H. Kenn. & L.E. Watson (ORCHIDACEAE). *Madroño* 61(1): 149-150.
- Cloud-Hughes, M.A. and M.A. Baker. 2014. Noteworthy Collection, California: *Lophocereus schottii* (Engelm.) Britton & Rose (CACTACEAE). *Madroño* 61(4):414-415.
- Baker, M.A. and M.A. Cloud-Hughes. 2014. Noteworthy Collection, California: *Opuntia x charlestonensis* Clokey (pro. sp.) (CACTACEAE). *Madroño* 61(4):411-412.
- Cloud-Hughes, M.A., M.A. Baker, and P.B. Breslin. 2014. Noteworthy Collection, Arizona: *Echinocereus chloranthus* subsp. *rhyolithensis* W. Blum & Mich. Lange (CACTACEAE). *Madroño* 62(3):181-182.

Professional Activities:

- Board Member, Southern California Botanists. April 2016-Present
- Editor, *Crossosoma*: Journal of the Southern California Botanists, Inc. December 2015-Present
- Senior Editor, Cholla Web (<http://opuntiads.com/cyl>). February 2016-Present
- Presenter, *Cylindropuntia chuckwallensis* (Cactaceae): A new species from Riverside and Imperial Counties, California. Long Beach Cactus and Succulent Society, June 2016; San Diego California Native Plant Society, May 2016; Palomar Cactus and Succulent Society, April 2016; Orange County California Native Plant Society and San Gabriel Cactus and Succulent Society, February 2016; Bakersfield, South Coast, and Gates Cactus and Succulent Societies, January 2016; Los Angeles and Santa Barbara Cactus and Succulent Societies, November 2015; Tucson Cactus and Succulent Society, October 2015; Cactus and Succulent Society of Southern Nevada, July 2015; Cactus and Succulent Society of America 2015 Biennial Convention, June 2015; California Native Plant Society 2015 Conservation Conference, January 2015 (poster); Riverside/San Bernardino County California Native Plant Society, June 2014; Southern California Botanists Symposium, November 2013 (poster)
- Presenter, San Diego Chapter California Native Plant Society, February 2014, and San Diego and San Diego Monitoring and Management, June 2014: *Defending the Rarest of the Rare: Habitat restoration and research in support of Chorizanthe orcuttiana at Naval Base Point Loma*
- Volunteer, San Diego Natural History Museum Herbarium, June – August 2013: Flora of North America Treatment Review
- Guest Teacher of Botany, Renaissance Village Academy, Summer 2010 & 2011
- Desert Tortoise Council Handling Workshop, October 2010
- Presenter, Society for Ecological Restoration California Chapter Annual Conference, October 2007, and Association of Environmental Professionals Conference, April 2006: *Restoration on Desert Military Lands*
- Presenter, San Diego Chapter California Native Plant Society, February 2007: *Guns & Roses: Adventures in Desert Restoration at the U.S. Army National Training Center, Fort Irwin*

Professional Memberships:

- California Native Plant Society
- Cactus and Succulent Society of America
- California Botanical Society
- Southern California Botanists
- Arizona Native Plant Society
- Nevada Native Plant Society
- Botanical Society of America
- Desert Tortoise Council

References:

1. Justin Wood, Associate Biologist, Aspen Environmental Group
(909) 568-5235
jwood@aspeneg.com

2. Gilbert Goodlet, EnviroPlus Consulting
(760) 954-4265
Torthunter@aol.com
3. Chez Brungraber, Proprietor, SummitWest Environmental, Inc.
(858) 220-5674
summitwestenv@gmail.com
4. Margaret Bornyaz, San Diego Operations Manager, ECorp Consulting, Inc.
(858) 232-3872
mbornyasz@ecorpconsulting.com
5. Julie Janssen, Project Manager, Senior Restoration Ecologist
(760) 696-2357
juljanssen@mac.com
6. Dr. Marc Baker, Proprietor, Southwestern Botanical Research
(928) 713-7009
marcbaker@cableone.net
7. Chris Blandford
chris@ironwoodconsultinginc.com
(949) 351-0192
8. Dr. Alice Karl, Proprietor, Alice Karl & Associates
(530) 666-9567
heliophile@mindspring.com
9. Heather Rothbard, Staff Botanist, URS Corporation
(858) 812-9292 x1547
Heather_Rothbard@urscorp.com
10. Alexis Cosper, Senior Biologist and Project Manager, Ecosphere Environmental Services
(970) 564-9100
watts@ecosphere-services.com
11. Tom Zink, Director, Soil Ecology and Restoration Group, San Diego State University
Research Foundation
(619) 594-5697
tzink@mail.sdsu.edu
12. Debra Gillis, Executive Director, Antelope Valley Resource Conservation District
(661) 305-3405
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