

Appendix 5.2A
Biologist Resumes

John Cleckler

Wildlife Ecologist

Education

B.S., Wildlife Biology, University of California, Davis

Professional Certifications

California Department of Fish and Game Scientific Collector's Permit

Relevant Experience

Mr. Cleckler's more than 18 years of experience include performing general and special-status wildlife surveys using standard census techniques. His expertise includes invertebrate and vertebrate natural history, vertebrate and invertebrate collecting methods, and identification of herpetile, bird, and mammalian species. He is familiar with state and federal regulations pertaining to both wildlife and wetlands. He prepares biological assessments and develops mitigation plans for Section 7 and 10(a) compliance under the Endangered Species Act.

Representative Projects

- **Ivanpah Solar Electric Generating System Application for Certification, San Bernardino County, BrightSource Energy.** Lead Biological Resources Scientist for 400 MW concentrating solar power project. Supervised a large crew of botanists and wildlife biologists in conducting field surveys for a 3,400-acre project area to the protocols and standards of the federal Bureau of Land Management, US Fish and Wildlife Service, California Department of Fish and Game, and California Energy Commission. Authored Desert Tortoise Management Plan for the project.
- **California Department of Transportation Regulatory Compliance Program, US Fish and Wildlife Service.** Serves as regulatory biologist for the review of California Department of Transportation (Caltrans) projects under Section 7 of the federal Endangered Species Act (ESA). Seconded to the US Fish and Wildlife Service regional office, prepares biological opinions under the ESA for Caltrans undertakings.
- **Fiber Optic Communications Cable, Level (3) Communications.** Performed a full range of biological permitting services in support of a nationwide fiber optic network installation project. This linear project included extensive segments transecting the Mojave Desert and the Central Coast regions. Approximately 75 percent of the buried fiber optic cable system was within railroad rights-of-way. The remainder was within highway rights-of-way and limited private lands. Responsibilities included environmental documentation and permitting, including wetland delineations, biological resource surveys, and agency consultation.
- **Fiber Optic Communications Project Construction Monitoring-Level (3) Communications.** Managed construction monitoring of a 96.5-mile long-haul fiber optic communications line. Special focus was placed on avoidance of desert tortoise and

John Cleckler

Mohave ground squirrel habitat. Included development and implementation of an environmental awareness program.

- **Bird/Wind Turbine Collision Study, California Energy Commission.** Participated in a 3-year wind farm impact study near Tehachapi and Palm Springs. Conducted standard point count surveys and scavenger studies to determine the correlation between bird activity and bird mortality in and around wind farm developments. Also included coordination of the Palm Springs field station, field staff, data entry, and report writing.
- **Mohave Ground Squirrel Survey, California Energy Commission.** Trapped, handled, and installed pit tags on Mohave ground squirrels near China Lake.
- **Desert Tortoise Survey, Kern River Gas Company.** Surveyed for, handled, marked, and relocated desert tortoises for a pipeline construction project. Monitored construction activities and maintained client relations. Coordinated biology crews and completed daily reports. Surveys were conducted in accordance with Biological Opinion #1-1-89-F36R.
- **Desert Tortoise Monitoring, Mission Geoscience.** Performed desert tortoise monitoring for exploratory drilling project near Barstow, California. Included presentation of an environmental awareness training program.
- **Sensitive Species Surveys, Coachella Valley Association of Governments.** Performed focused surveys for a highway interchange expansion project. Focused surveys were conducted for Coachella Valley fringed-toed lizard, Coachella Valley Jerusalem cricket, Coachella Valley giant sand treader cricket, and Coachella Valley grasshopper.
- **Inland Empire Energy Center (IEEC), Calpine Corp.** Performed biological resources field surveys for new transmission line route, conducted impacts assessment and agency consultations for transmission line construction, and prepared the biological resources section of the petition to amend the project's California Energy Commission license.
- **Oro Grande Sand and Gravel Mine Restoration Project, Vulcan Materials/CalMet Division.** Performed a biological reconnaissance survey to determine impacts associated with the reclamation strategy and proposed reclamation activities. Special focus was placed on determination of suitable desert tortoise habitat. Developed an environmental awareness program and a list of avoidance measures.
- **Desert Tortoise Survey, Los Angeles Department of Water and Power.** Surveyed for, measured, weighed, marked, and relocated desert tortoises for a Los Angeles Department of Water and Power transmission line construction project. Constructed tortoise burrows and relocated eggs. Monitored construction activities and maintained client relations. Compiled a variety of daily reports.
- **Desert Tortoise Survey, Kern River Gas Company.** Surveyed for, handled, marked, and relocated desert tortoises for a pipeline construction project. Monitored construction activities and maintained client relations. Coordinated biology crews and completed a variety of daily reports. Surveys were conducted in accordance with Biological Opinion #1-1-89-F36R.



SYCAMORE ENVIRONMENTAL CONSULTANTS, INC.

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RESUME

R. JOHN LITTLE, Ph.D.
Botanist/ Project Manager

EDUCATION

Claremont Graduate School, Claremont, CA
California State University, Fullerton, CA
University of Utah, Salt Lake City, UT

Ph.D. Botany, 1980
M.A. Biology, 1977
B.S. Botany, 1968

CERTIFICATION/ PERMITS: Wetlands Delineation; Certified Arborist WE-1057A; Identification of CA fairy shrimps; Federal Fish and Wildlife Permit PRT-799564-2 (Vernal Pool Crustaceans); California Department of Fish and Game Scientific Collecting Permit #801049-03; DFG State Designated Endangered, Threatened and Rare Plants Collecting Voucher Permit #05061; Rail Road Safety Training.

EXPERIENCE

1991-Present Sycamore Environmental Consultants, Inc., President
(Botany, Wildlife Biology, Wetlands, Habitat Restoration)
1980-1991 EnviroSphere Company, Director of Environmental Services and Supervising Botanist
1976-1980 Independent, part-time biological consulting for various firms and agencies,
concurrent with Ph.D. program
1977-1980 Lecturer and Instructor of Botany and Biology, concurrent with Ph.D. program
1977-1980 Ph.D. Graduate Studies, Claremont Graduate School, Claremont, CA
1975-1977 M.A. Graduate Studies, California State University, Fullerton, CA
1972-1975 Self-employed
1968-1972 U.S. Navy, Commissioned Officer

PROFESSIONAL AFFILIATIONS

American Society of Plant Taxonomists	International Society of Arboriculture
California Botanical Society	Society for Ecological Restoration, California
California Native Grass Association	California Invasive Plant Council
California Native Plant Society	President, California Botanical Society, 1997-2000

SELECTED PROJECT EXPERIENCE

Botanical Experience – Desert and Other Arid Areas

Rice Airfield Solar Energy Project. Lead botanist and conducted field surveys for special-status plant species on 2,400 acres of desert land and 11 miles of transmission line for a project located in the Colorado (Sonoran) Desert in southeast CA. Riverside Co. CH2MHill, Sacramento, CA.

Edison Mission Energy Project, Kern Co. Lead botanist and conducted field surveys for special-status plant species on 849 acres of desert land and 11 miles of transmission line for a project in the Mojave Desert. CH2MHill, Sacramento, CA.

Edison Mission Energy Project, Los Angeles Co. Lead botanist and conducted field surveys for special-status plant species on 1,010 acres of desert land and two, 11 mile long transmission line routes for a project in the Mojave Desert. CH2MHill, Sacramento, CA.

Ak-Chin Indian Reservation AZ, Water Supply Project EIS. Conducted botanical surveys for T/E species, mapping of desert vegetation, and analyses of wetland and riparian vegetation; prepared mitigation plans (with Ebasco). Evaluated environmental impacts and mitigation measures from construction of water wells, pipelines, and canals in three desert valleys encompassing over 123,000 acres. U.S. Bureau of Indian Affairs, Phoenix, AZ.

Dissertation Topic: Floral mimicry between two desert annuals, *Mohavea confertiflora* (Scrophulariaceae) and *Mentzelia involucrata* (Loasaceae). Involved two years of research at six study sites, four in Riverside Co. and one in Imperial Co. CA, and one in Kofa Mountains, AZ.

Tenneco Oil Company, Placerita Canyon, CA. Conducted botanical surveys for threatened or endangered species on 300 acres of chaparral and coastal sage scrub plant communities for 8 miles of proposed transmission lines and 2 miles of gas pipeline routes.

Ft. Apache Freeway EIS. Technical lead (with Ebasco) for botanical, wetland, and T/E species evaluations for a new highway project in Arizona. U.S. Bureau of Indian Affairs, Phoenix, AZ.

Federal Aviation Administration, NM. EIS. Responsible for all biological and agricultural impact analyses associated with construction and operation of a new airport in Ruidoso, NM.

Biological Surveys. Responsible for evaluation of biological resources in a 200 acre desert site in Coachella Valley, CA. Surveys conducted for special-status species including the federal threatened Coachella Valley fringe-toed lizard (*Uma inornata*).

Forest Management Plan EA, San Carlos Indian Reservation, AZ. Lead biologist for a team of terrestrial, forestry, aquatic, and wildlife biologists for Environmental Assessment relative to development of Forest Management Plan. Responsible for vegetation, wildlife and aquatic resources. Bureau of Indian Affairs, San Carlos, AZ.

U.S. Bureau of Land Management EA, for Newmont Gold, Elko, NV. Conducted special-status plant surveys east of Elko, NV on 960 acres of BLM land.

Delano Biomass Project EIR. Project Manager for EIR prepared for a 49.9 MH biomass fueled power plant located south of Delano, Kern County, CA. Conducted terrestrial ecology and agricultural impacts analyses. EIR Certified 1984.

Port of Long Beach, CA, EIR. Senior biologist for EIR investigation of existing conditions and biological impacts relating to proposed coal transshipment facilities and railroad lines linking Long Beach Harbor and seven western states.

Irvine Ranch Water District, CA. EIR. Identified biologically sensitive areas and analyzed potential impacts for the 2,800 acre Whiting Ranch development in Orange Co., relative to fresh and wastewater pipeline routes, reservoir sites, and pumping station facilities.

San Diego Energy Recovery Project (SANDER), AFC. Prepared expert testimony on potential air pollution effects on native vegetation, wildlife, and aquatic ecosystems in vicinity of the San Diego Co. Power Plant Site Certification Program, California Energy Commission.

Sycamore Cogeneration Project, AFC. Technical lead and expert testimony for botanical, wildlife, and water resources disciplines for wildlife impacts due to construction and operation of a new 10 mile long, 115 kV transmission line corridor in central CA. Power Plant Site Certification Program, California Energy Commission.

Botanical Experience – Other

River Highlands Community Plan and EIR. Conducted botanical, wildlife, and wetland studies on 22,000 acres for community plan and EIR. Yuba Co.

Heavenly Valley Master Plan EIR/EIS. Conducted botanical surveys for 8 sensitive plant species on 3,500 acres of private and U.S. Forest Service lands. El Dorado Co. and NV.

City of Lathrop, Biological Surveys & Wetland Delineation. Conducted botanical surveys and wetland delineation for 5,500 acre project on Stewart Tract in west San Joaquin Co. San Joaquin Co.

City of Santa Rosa Long-Term Subregional Wastewater Project EIS/EIR. Conducted botanical surveys for 182 special-status plant species in grassland, riparian, woodland, and vernal pool communities on over 50,000 acres of potential reservoir and agricultural irrigation sites, pipeline distribution routes, access roads, and downstream habitats. Prepared maps and technical reports for EIR/EIS. Project study areas included Petaluma, Sebastopol, and the City of Santa Rosa. Sonoma and Marin cos.

IRCTS Site. Conducted botanical surveys for special-status plant species on 3,925 acres. Sacramento Co.

Cache Creek Cordylanthus Survey, The Lower Cache Creek Flood Control Study. Conducted focused botanical surveys for a U.S. Army Corps of Engineers project. Yolo Co.

French Camp Conservation Bank. San Joaquin Co. 2004. Conducted botanical and general biological resources survey and jurisdictional wetland delineation on 84 acre site. Prepared Biological Resources Evaluation and Jurisdictional Delineation Report.

Fleischman Botanical Survey. Conducted botanical survey for 7 special-status species on a five acre parcel in Shingle Springs. El Dorado Co.

Barnett Business Park. Conducted botanical survey for 7 special-status species on a five acre parcel in Shingle Springs. El Dorado Co.

Eastwood Park Unit No. 5. Conducted botanical survey for special-status species on a 15 acre parcel in Cameron Park and prepared a mitigation and monitoring plan for *Galium californicum* ssp. *sierrae* and *Wyethia reticulata*. El Dorado Co.

Hangtown Creek Development. Conducted botanical and wildlife surveys on 18.3 acres; the site consists of steep slopes with three small ravines that drain into Hangtown Creek. El Dorado Co.

Moss Landing Power Plant AFC. Conducted botanical and wildlife special-status species surveys, wetland delineation, and prepared biological section of Application for Certification (AFC). Monterey Co.

Pacific Fiber Link Fiber Optic Conduit Installation Project. Conducted botanical, wildlife surveys and wetland delineations along a fiber optic route from the Oregon border to Sacramento, CA. Served as Project Manager. Siskiyou, Modoc, Shasta, Tehama, Butte, Sutter, Yolo, Sacramento cos.

City of Pleasanton General Plan EIR. Conducted botanical surveys to identify areas suitable for permanent preservation within 48,000 acre planning boundary; developed strategies to preserve and protect biological wildlife habitat and riparian corridors. Alameda Co.

Nextel Communications Deer Creek Site 673N. Conducted botanical surveys for 5 acres for a proposed small radio transmitter site and access road. El Dorado Co.

Laguna Creek Floristic Surveys. Conducted botanical surveys on 800 acres for sensitive plant species in wetland and vernal pool habitats along Laguna Creek. Sacramento Co.

South Tahoe Public Utility District (STPUD) Pipeline Project. Conducted botanical surveys for 4 special-status plant species along the proposed route of a portion of an existing wastewater export pipeline that passed through the Upper Truckee River stream environment zone (SEZ). El Dorado Co.

California Forest Highway 7. Conducted botanical surveys along 11.8 miles of forest highway right-of-way for proposed road widening on east side of Mendocino National Forest. Glenn Co.

Gold Creek Golf Course Biological Studies. Conducted wetland delineation, and focused surveys for special-status species on 379 acres of forested lands. Prepared Wetland Mitigation and Monitoring Plan for Corps 404 Permit; a Revegetation and Erosion Control Plan for DFG 1603 Streambed Alteration Agreement; and Golf Course Management Plan. El Dorado Co.

Pine Hill Cloud Seeder Facility for SMUD. Conducted rare plant species surveys for a SMUD silver-iodide cloud seeding generator facility at Pine Hill and three alternative sites. El Dorado Co.

Revised South Yuba Drainage Master Plan. Conducted jurisdictional wetland delineation, special-status species surveys, and preparation of environmental report for construction of a new, 5-mi long flood control canal. Yuba Co.

Spin Acres Ranch Biological Assessment. Conducted special-status wildlife and plant species surveys, conducted raptor nest surveys, conducted jurisdictional wetland delineation for 100-acre rural subdivision located along Kelley Creek in Shingle Springs. El Dorado Co.

Timberline Village Project. Conducted wetland delineation and botanical assessment of 90 acre Timberline Village Project; conducted tree survey of over 2,500 oaks. Placer Co.

Hansen Lakes Development. Conducted update of jurisdictional delineation for Wetland Mitigation Plan, and Corps 404 permitting for this 300 acre project which included a 15-acre biological preserve; obtained Corps NW 26 permit. Conducted detailed biological surveys, vernal pool surveys, arborist surveys, and special-status plant and wildlife surveys for EIR. Sacramento Co.

I-880 Intermodal Corridor Study. Conducted biological surveys and prepared map for sensitive plant and wildlife habitats and wetlands within a 40-mile long corridor between Oakland and San Jose. Alameda Co.

Penn Mine. Conducted survey and prepared floristic inventory of vascular plant species at 100 acre Penn Mine site near Comanche Reservoir. Calaveras Co.

Muck Valley Hydroelectric Project. FERC License Application. Technical review (with Ebasco) of botanical resources and vernal pool wetland impacts hydroelectric and transmission line construction. Lassen Co.

Supplemental Biological Assessment for California-Oregon Transmission EIS/EIR. Conducted botanical surveys of threatened and endangered plant species along California-Oregon Transmission Project reroute on Jersey Island, Contra Costa Co.

Cottonwood-Elverta 230-kV Transmission Line Reconductor Project. Conducted botanical and wildlife surveys and prepared all biological analyses, botanical and wildlife surveys, wetlands mapping, mitigation plans between Oroville and Elverta, CA., consulted with USFWS, and prepared a Biological Assessment for Bald Eagle. Project Manager (with Ebasco). Western Area Power Administration. Sacramento Co.

SMUD AFC Supplement for PG&E Pipeline System. Conducted specialized wildlife, vegetation, and wetland resource evaluations for four new gas pipeline segments. Studies conducted in accordance with CECs guidelines for an Application for Certification (AFC). Yolo and Sacramento cos.

Glenwood Springs Cogeneration and Desalinization Project EA, Colorado. Responsible (with Ebasco) for botanical surveys, mapping, and Colorado special-status species analyses for a desalinization and cogeneration project; manager of transmission line routing studies for Mission Energy, Irvine, CA.

Rocky Point Pumped Storage Project, Colorado. Botanical surveys, mapping, and special-status species analyses for routing of 40 miles of transmission lines through high elevation Rocky Mountains (with Ebasco).

Devil's Nose Hydroelectric Project. FERC License Application. Technical lead (with Ebasco) for botanical surveys, mapping, special-status species analyses, and mitigation plans associated with construction of hydroelectric project and transmission lines. Amador Co.

Sierra Ski Ranch Expansion Project DEIR/EIS. Project Manager (with Ebasco) for all botanical and wildlife studies for 2,000 acres; conducted botanical surveys and delineation of wetland communities, prepared mitigation plans. El Dorado Co.

Texas Hill EA. Conducted botanical, riparian, wetland habitat surveys, mitigation plans, and T/E species analyses for a reservoir project (with Ebasco) for El Dorado Irrigation District. El Dorado Co.

Hazel Creek EA. Responsible (with Ebasco) for botanical surveys, including riparian and wetland habitats, mapping, and T/E species analyses for water tunnel project for El Dorado Irrigation District. El Dorado Co.

Thesis Topic: A flora of Starr Ranch, a 4,000 acre National Audubon Sanctuary in the Santa Ana Mountains, Orange County, CA. 1975 - 1978. Little, R. J. 1978. A Flora of Starr Ranch. Masters Abstracts 16(I).

ACHIEVEMENTS AND OTHER EXPERIENCE

- President, California Botanical Society. 1997-2000.
- Council Member, California Botanical Society. 1993-1997
- Reviewer for research papers submitted to: *American Journal of Botany*, *Biotropica*, *Madrono*, and *Oikos*.
- Noted in *Who's Who in Frontiers of Science and Technology*. 2nd ed. 1985. Marquis Who's Who, Inc.
- President, California Native Plant Society, Orange County Chapter. 1983-1984.
- Board of Directors, Southern California Botanists. Rancho Santa Ana Botanic Garden, Claremont, CA. 1979-1985.
- State Board of Directors, California Native Plant Society, Sacramento, CA. 1983-1984.
- Visiting Scholar, University of California Herbarium, Berkeley.
- NROTC Scholarship, University of Utah, Salt Lake City, Utah. 1964-1968.
- Claremont Graduate School, Graduate Traineeship. 1978-1980.
- Postdoctoral Research, Rancho Santa Ana Botanic Garden. 1980.

SELECTED TECHNICAL REPORTS AND PUBLICATIONS (Partial List)

- Little, R.J. 2005. Biological Resources Evaluation and Jurisdictional Delineation Report for Fern Island and Headreach Island Conservation Bank, City of Stockton, CA, San Joaquin County. Prepared for TCN Properties, LP by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Biological Resources Evaluation and Jurisdictional Delineation Report for Joallan Subdivision Project, City of Firebaugh, CA, Fresno County. Prepared for Mr. Bob Bahrami by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Biological Survey Letter Report for APN # 057-021-002, Angels Camp, CA. Prepared for D. Morrow by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Biological Survey Letter Report for Long's Lot APN # 058-013-012, Angels Camp, CA. Prepared for Johnson & Reed by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Biological Survey Letter Report for Lot A, APN 062-016-026, Angels Camp, CA. Prepared for Stelte Construction Company by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Biological Survey Letter Report for Lot B, APN 062-016-025 and APN 062-005-022, Angels Camp, CA. Prepared for Stelte Construction Company by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Islands at Riverlake Administrative Draft Environmental Impact Report (SCH# 2002062103). Prepared for City of Sacramento, CA by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Natural Resources Due Diligence Evaluation for the Denier Property (APN # 150-072-003), Sacramento County, CA. Prepared for Pacific Union Homes, Stockton, CA by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Operations and Management Plan for Allendale Wetland and Wildlife Preserve (Corps Regulatory No. 200000317), Winters, CA. Prepared for Hines Nurseries Inc. by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Operations and Management Plan for French Camp Conservation Bank (Corps Regulatory No. 200400941) Stockton, CA, San Joaquin County. Prepared for TCN Properties, LP by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2005. Planting and Monitoring Plan for French Camp Conservation Bank (Corps Regulatory No. 200400941) , Stockton, CA. Prepared for TCN Properties, LP by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Biological Resources Evaluation and Jurisdictional Delineation Report for French Camp Conservation Bank, City of Stockton, CA, San Joaquin County. Prepared for TCN Properties, LP by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Jurisdictional Delineation Report for the Sleepy Hollow Court Project, City of Placerville, CA. Prepared for Designtech by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Mitigation and Monitoring Plan for Valley Elderberry Longhorn Beetle for Cordelia Road Bridge (23C-037) at Suisun Creek, Solano County, CA. Federal Aid # BRLZ-5923 (043). Prepared for California Department of Transportation - District 4 & Solano County Transportation Department by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Natural Environment Study, Biological Assessment, and Jurisdictional Delineation Report for Cordelia Road Bridge (23C-037) at Suisun Creek, Solano County, CA. Federal Aid # BRLZ-5923 (043). Prepared for California Department of Transportation - District 4 & Solano County Transportation Department by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Paradise Cut and Levee Restoration Plan. Prepared for River Islands at Lathrop by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Riparian brush rabbit Mitigation and Management Plan. Prepared for River Islands at Lathrop by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2004. Wetland Mitigation and Monitoring Plan for Allendale Nursery Project (Corps Regulatory No. 200000317). Solano County, CA. Prepared for Hines Horticulture Inc. by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2003. Biological Assessment and Mitigation and Monitoring Plan for Valley Elderberry Longhorn Beetle at Cordelia Road Bridge (23C-037) at Suisun Creek, Solano County, CA. Federal Aid # BRLZ-5923 (043). Prepared for California Department of Transportation - District 4 & Solano County Transportation Department by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2003. Biological Resources Evaluation Report for Jackson Hills Golf Course and Residential Community Project, Amador County, CA. Prepared for Jackson Hills, LLC by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2003. Emergent Wetland Creation Plan. Prepared for River Islands at Lathrop by Sycamore Environmental Consultants, Inc., Sacramento, CA.

- Little, R.J. 2002. Biological Assessment for The Home Depot Project, Placerville, CA. El Dorado County. Prepared for The Home Depot, USA, Inc. by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2002. Biological Resources Evaluation Report for The Home Depot Project, Placerville, CA, El Dorado County. Prepared for The Home Depot, USA, Inc. by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2002. Jurisdictional Delineation Report for Jackson Hills Development, Amador County. Prepared for Jackson Hills, LLC by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2002. Mitigation and Monitoring Plan for Riparian Restoration of Hangtown Creek for The Home Depot Project. Placerville, CA. Prepared for Little Diversified Architectural Consulting by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2001. Botanical Survey Report for a Federal and State Endangered Plant Species: *Cordylanthus palmatus* (palmate-bracted bird's-beak) for the Lower Cache Creek Flood Damage Reduction Study, Yolo County, CA. Prepared for CDM Federal Programs Corporation by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2001. Evaluation of Giant Garter Snake Habitat for Lower Cache Creek Flood Damage Reduction Study, Yolo County, CA. Prepared for CDM Federal Programs Corporation by Sycamore Environmental Consultants, Inc., Sacramento, CA.
- Little, R.J. 2001. Revised Natural Environment Study and Wetland Delineation Report for the Peggy Mensinger Bicycle Path. Federal Aid # STPLE-5059 (008). Prepared for Caltrans District 10 and Federal Highway Administration by Sycamore Environmental Consultants, Inc., Sacramento, CA. under contract to City of Modesto Parks and Recreation Department.
- Little, R.J. 1999. Notre Dame Creek Management Plan for City of Belmont, CA. Prepared for Wagstaff & Associates under contract with City of Belmont.
- Little, R.J. 1998. Biological and Fisheries Resources Study Report for Weber Point Seawall. Prepared for City of Stockton.
- Little, R.J. 1998. Conceptual wetland mitigation plan for San Francisco International Airport (for a Section 404 Individual Permit Application).
- Little, R.J. 1998. Field Survey Report for California red-legged Frog: Suisun Valley Road Bridge (23C-076) at Suisun Creek.
- Little, R.J. 1998. Selection Strategy for San Francisco International Airport Wetland Mitigation Sites.
- Little, R.J. 1998. Site Assessment Report for California red-legged frog for South Olivehurst Pumping and Detention Basin. Yuba Co.
- Little, R.J. 1998. Site Assessment Report for California red-legged frog for Pleasants Valley Road Bridge (23C-008) at Pleasants Creek. Solano Co.
- Little, R.J. 1998. Site Assessment Report for California red-legged frog for Pleasants Valley Road Bridge (23C-010) at Pleasants Creek. Solano Co.
- Little, R.J. 1998. Site Assessment Report for California Red-legged frog for Rancho San Juan Project. Monterey Co.
- Little, R.J. 1998. Site Assessment Report for California red-legged frog for South Olivehurst Pumping and Detention Basin. Yuba Co.
- Little, R.J. 1998. Wetland Mitigation and Monitoring Plan and Revegetation and Erosion Control Plan for Section 404 Individual Permit Application, for Happy Valley Municipal Golf Course.
- Little, R.J. 1998. Wildlife survey report for Rancho San Juan Project – Western burrowing owl and American badger. Monterey Co.
- Little, R.J. 1997. Biological Assessment & Mitigation and Monitoring Plan for Valley elderberry longhorn beetle at Morrison Lane Bridge (23C-0177) at Suisun Creek. Solano Co.
- Little, R.J. 1997. Biological Assessment & Mitigation and Monitoring Plan for Valley elderberry longhorn beetle at Pleasants Valley Road Bridge (23C-095) at Ulatis Creek. Solano Co.
- Little, R.J. 1997. Botanical Survey Report for Special-Status Plant Species for J. Fleischmann; Shingle Springs, CA. El Dorado Co.
- Little, R.J. 1997. Botanical Survey Report for Special-Status Plant Species for McClone Construction Company at Barnett Business Park, Shingle Springs, CA. El Dorado Co.
- Little, R.J. 1997. Restoration Plan for *Draba asterophora* var. *asterophora* at Heavenly Ski Resort, South Lake Tahoe, El Dorado County, CA.
- Little, R.J. 1997. Site Assessment Report for California red-legged frog for Morrison Lane Bridge (23C-0177) at Suisun Creek. Solano Co.
- Little, R.J. 1997. Site Assessment Report for California Red-legged frog for Pleasants Valley Road Bridge (23C-095) At Ulatis Creek. Solano Co.
- Little, R.J. 1996. Agricultural Irrigation, Botanical Resources Technical Memorandum. For Santa Rosa Subregional Long-Term Wastewater Project EIR/EIS. Sonoma & Marin cos.
- Little, R.J. 1996. Biological Resources Report for the Vine Place Subdivision, Vacaville, Solano Co, CA.

- Little, R.J. 1996. Conceptual Plan To Develop a Wetland Mitigation Bank near Klamath Falls, OR, for Klamath Pacific Corp.
- Little, R.J. 1996. Elderberry Mitigation, Monitoring, and Maintenance Plan for the Pleasants Valley Road at Foothill Drive Bridges Replacement Project (Nos. 23C-93, 23C-94, 23C-84, & B1290-1.75). Solano Co.
- Little, R.J. 1996. Geysers Botanical Resources Technical Memorandum. For Santa Rosa Subregional Long-Term Wastewater Project EIR/EIS.
- Little, R.J. 1996. Reservoir, Botanical Resources Technical Memorandum. For Santa Rosa Subregional Long-Term Wastewater Project EIR/EIS.
- Little, R.J. 1996. Special-status Plant Species and Sensitive Natural Communities, Botanical Resources Technical Memorandum. For Santa Rosa Subregional Long-Term Wastewater Project EIR/EIS.
- Little, R.J. 1996. Wastewater Transmission Pipeline, Botanical Resources Technical Memorandum. For Santa Rosa Subregional Long-Term Wastewater Project EIR/EIS.
- Little, R.J. 1996. Wetland Mitigation and Monitoring Plan for 185 Acre Allendale Site, Winters, Solano Co, CA.
- Little, R.J. 1996. Wetland Restoration Plan for Buttonbush Recreation Area, Stanislaus River Parks, U.S. Army Corps of Engineers.
- Little, R.J. 1995. Elderberry Mitigation, Monitoring, and Maintenance Plan for Santa Fe Railway Company, Riverbank Bridge (1096.719).
- Little, R.J. 1995. Gold Course Management Plan for Gold Creek Golf Course, Camino, CA.
- Little, R.J. 1995. Revegetation and Erosion Control Plan for 1603 Streambed Alteration Agreement for Santa Fe Railway Company, Riverbank Bridge (1096.719). Stanislaus and San Joaquin cos.
- Little, R.J. 1995. Revegetation and Erosion Control Plan for 1603 Streambed Alteration Agreement for Gold Creek Golf Course, Camino, El Dorado Co., CA.
- Little, R.J. 1995. Wetland Mitigation and Monitoring Plan for Gold Creek Golf Course, Camino, El Dorado Co., CA.
- Little, R.J. 1995. Wetland Mitigation and Monitoring Plan for Target N.W. Distribution Center Albany, OR. Linn Co.
- Little, R.J. 1994. Botanical survey for Special-Status Plant Species for STPUD A-Line Export Pipeline Relocation Project. El Dorado Co., CA.
- Little, R.J. 1994. Botanical Survey for Special-Status Plant Species, FHWA California Forest Highway 7 Glenn County, CA.
- Little, R.J. 1994. Elderberry Monitoring and Maintenance Plan for Pleasants Valley Road Bridge (23C-97). Solano Co. Transportation Department.
- Little, R.J. 1994. Elderberry Monitoring Plan for State Route 99 Conversion, Livingston Freeway, Merced Co., CA. CALTRANS District 10.
- Little, R.J. 1994. Orchard Creek Wetland Mitigation Bank, Placer County, CA. Preliminary Wetland Development Plan.
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Mercy Vaughn is Co-owner and President of Sundance Biology, Inc. and has been conducting biological field studies since 1990.

AREAS OF EXPERTISE

Biological resource inventories for environmental assessments, wildlife and botanical inventories, environmental compliance monitoring, and biological monitoring for Threatened, Endangered, and sensitive species. Supervised field research teams as well as environmental monitoring crews for T & E species protection, erosion control, and habitat restoration pertaining to linear and non-linear construction projects. Experience working in California, Nevada, and Arizona for the private sector, federal, state, and local agencies, and on U.S. military installations. Experience working in Mexico with state and federal agencies.

Experience in all aspects of scientific research including study design, proposal writing, data collection, data analysis, reporting, field crew training and supervision.

Foreign Language: Bilingual Spanish/English

PERSONAL DATA

Birth date: 1 April 1968
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EDUCATION

B.A. Ecology and Evolutionary Biology, 1993. University of Arizona, Tucson, Arizona.
Eight units of graduate level biology course work completed at University of Arizona, Tucson, Arizona-1993 and Northern Arizona University, Flagstaff, Arizona-2000.

Baccalaureate Research: Conducted a two and one-half year study in conjunction with Dr. Charles Lowe (Dept. of Ecology and Evolutionary Biology, University of Arizona), to determine population density, age structure, movement patterns and natural history of the desert tortoise on Desert Peak in Southeastern Arizona. The study was conducted year-round from August 1990 through December 1992 and again in 2003.

SPECIALIZED EXPERIENCE

Nineteen years experience as a Biological and Environmental/Compliance monitor, conducting presence / absence surveys, density-estimate transects, and demographic and health studies of the federally listed desert tortoise (*Gopherus agassizii*) in California, Arizona, Nevada and Sonora, Mexico. Studies involved detailed collection of data on plant communities, geomorphology, assessment of human impacts and other threats to the species, wildlife species lists in addition to intensive data collection of tortoise populations. Have handled desert tortoises in over 3000 encounters since 1990. Authorized to put radio transmitters on desert tortoises by USFWS. Authorization to handle desert tortoises on over 30 projects has been obtained in California from the Ventura and Barstow offices of the US Fish & Wildlife Service, the Barstow and Needles offices of the Bureau of Land Management, and the Palmdale and Fresno offices of the California Dept. of Fish & Game; in Arizona from the Phoenix office of the Arizona Dept. of Game & Fish; in Nevada the Nevada Dept. of Wildlife; and in Sonora, Mexico from the Gobierno Tradicional Coma'ac (Seri Indian Traditional Government) and SEMARNAT (Secretaria del Medio Ambiente de Recursos Naturales).

Authorized Field Investigator for CA threatened Mojave Ground Squirrel since 2005.

SUMMARY OF PROJECTS

Natural Resource Management.....	35+
Environmental Compliance Monitoring.....	50+
Resource Inventory.....	40+
Interpretive.....	2
Research.....	5

***Bold notation indicates current projects**

Nov. 2008-present	URS Corporation, Fresno, CA	Developing and overseeing implementation of a revegetation plan For CATRANS for the Mojave Bypass, Kern County, CA
Oct. 2008	CH2MHill Sacramento, CA	Consulting Biologist managed desert tortoise presence/absence Surveys on a proposed solar energy site in southern Nevada.
August 2008	enXco Development Corporation N. Palm Springs, CA	Consulting Biologist conducted habitat quality assessment for desert tortoise on 640 acres near California City, CA
March-July 2008	Sapphos Env. Inc. Pasadena, CA	Consulting Biologist managed desert tortoise presence/absence Survey on a 11,700 acre proposed wind energy site in the West Mojave Desert. Biological crew of 16 people.
March-July 2008	Sunrise Consulting Big Bear, CA	Consulting Biologist, Managed Six Mojave Ground Squirrel Protocol Trapping Surveys on one site, Adelanto, CA.
March-July 2008	Impact Sciences, Inc. Pasadena,, CA	Consulting Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Survey and managed desert tortoise presence/absence surveys on a 140 acre site, Lenwood, CA.
March-July 2008	CH2MHill Sacramento, CA	Consulting Biologist managed desert tortoise presence/absence Surveys on a proposed solar energy site in Ivanpah Valley, CA.
March-July 2008	CH2MHill Sacramento, CA	Consulting Biologist managed desert tortoise presence/absence Surveys on a proposed solar energy site in southern Nevada.
March-July 2008	CH2MHill Sacramento, CA	Consulting Biologist managed desert tortoise presence/absence Surveys on a proposed casino site in 29Palms, CA.
March-July 2008	Bill Vanherweg San Luis Obispo, CA	Wildlife Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys at three sites for SCE proposed powerline, Rosamond, CA.
March 2008-August	AES Wind Generation San Diego, CA	Consulting Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys and managed comprehensive sensitive species survey for a proposed Wind Energy site, Dagget, CA.
Jan. 2008-present	ESA, Inc. Sacramento, CA	On-call construction compliance monitor for the Nacimiento water pipeline installation, San Luis Obispo County, CA
March- July 2007	Bill Vanherweg, San Luis Obispo, CA	Consulting Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys on three sites, Mojave, CA.
March- July 2007	Royal Investors Group, Llc, Santa Monica, CA	Consulting Biologist, Managed Mojave Ground Squirrel Protocol Trapping Surveys on three sites, Palmdale, CA.
March 2007-July	DUDEK, Inc. Sacramento, CA	Consulting Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys and managed desert tortoise, Mojave-fringe-toed lizard, and burrowing owl presence/absence surveys on a 1200 acre site, Barstow, CA.
March 2007-July	Impact Sciences, Inc. Pasadena,, CA	Consulting Biologist, Managed Mojave Ground Squirrel Protocol Trapping Surveys and managed desert tortoise presence/absence surveys at two sites, Palmdale, CA.
March 2007-July	Hillcrest Development, Barstow, CA	Consulting Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys and conducted a general biological inventory on a 69 acre site, Barstow, CA.
Jan. 2007	Asphalt Construction, Inc. Mojave, CA	Wildlife Biologist, Conducted desert tortoise presence/absence surveys for reclamation of a mine site near Ridgecrest, CA.

Jan. and Aug. 2007	AES Seawest, Inc. San Diego, CA	Wildlife Biologist, Conducted desert tortoise presence/absence surveys for meteorological stations near Dagget, CA
July 2006	CSU, Bakersfield	Wildlife Biologist, Assisted with long-term monitoring study trapping Tipton kangaroo rats, giant kangaroo rats, San Joaquin Valley antelope ground squirrels, Bakersfield, CA.
Nov. 2006	Rachel Woodard Ridgecrest, CA	Monitored Implementation of Remedial Revegetation along SOCAL Gas Pipeline 6905, Kramer JCT, CA
Aug.-Nov 2006	Jones and Stokes Associates, Inc. Sacramento, CA	Lead Biologist for desert tortoise biological monitoring for Caltrans projects along I-15, I-40, and SR95, CA.
March –July 2006	Sapphos Env. Inc. Pasadena, CA	Lead Biologist for desert tortoise biological monitoring for Caltrans projects along I-15, I-40, and San Bernardino kangaroo rat monitoring along SR210, CA.
July 2006	Environmental Planning Group, Tucson, AZ	Wildlife Biologist, Conducted desert tortoise relative abundance transects along a proposed power line corridor, NV.
March –July 2006	Sapphos Env. Inc. Pasadena, CA	Wildlife Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys at two sites, Rosamond, CA and one site in Victorville, CA, managed desert tortoise presence/ absence survey at Victorville site.
March –July 2006	Circle Mountain Biological Wrightwood, CA	Wildlife Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys, Ridgecrest, CA
March-June 2006	Morro Group San Luis Obispo, CA	Lead Field Biologist , Coordinated desert tortoise clearance surveys, monitoring of tortoise proof fence installation, burrowing owl relocation and Joshua tree relocation for SR14 expansion for Caltrans.
March –July 2006	Impact Sciences, Inc. Pasadena, CA	Wildlife Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys and managed desert tortoise presence/absence surveys at two sites, Palmdale, CA and Barstow, CA.
Nov. 2005-present	Northwestern Mexico Desert Tortoise Research Project	Research coordinator for ongoing desert tortoise ecology, genetics and disease studies in the tropical deciduous forest and desert thornscrub communities of Sonora and Sinaloa Mexico.
October 2005	Alice Karl and Assoc.	Wildlife Biologist, Conducted desert tortoise clearance surveys on 2,200 acres in the Colorado Desert near Brawley, CA.
Sept. 2005	University of Arizona	Lead Field Biologist for desert tortoise research conducted at Organ Pipe Natl. Monument, AZ.
April-July 2005	Bill Vanherweg Bakersfield, CA	Wildlife Biologist, Conducted Mojave Ground Squirrel Protocol Trapping Surveys at two sites in Lancaster, CA.
Mar 2005	Phil Leitner	Wildlife Biologist, Assisted with Mojave Ground Squirrel trapping study in Coso Basin on the Naval Air Weapons Station at China Lake, CA. (handled 12 Mojave ground squirrels)
Mar-May 2005	Sapphos Env. Inc. Pasadena, CA	Lead Field Biologist for desert tortoise presence/absence survey on a 5,500 acre proposed wind energy site in the West Mojave Desert. Biological crew of up to 16 people.
Sept 2003-present	Hyundai Motor America Ann Arbor, MI	Lead Biologist for construction compliance monitoring, desert Tortoise clearance surveys for construction of vehicle test track on 4,600 acres in the West Mojave Desert and long-term mitigation monitoring, including sensitive plant and bird surveys, MGS trapping and revegetation implementation. Managed biological crew of up to 60 people. Kern County, CA.

Dec. 2002-July 2003	Rincon Consultants, Inc. Ventura, CA	Environmental Consultant/Biological Monitor. Environmental assessments and biological monitoring/environmental compliance for right-of-way maintenance of SCG gas transmission lines. San Bernardino, Riverside, and Los Angeles Co. Monitored for multiple species and sensitive habitats. 20 projects to date.
Dec. 2002	Southern California Gas Co. Victorville, CA	Monitored 2 miles of road grading along SCG gas transmission line 6905 near Kramer Junction, CA. Monitored for sensitive species, Mojave ground squirrel, burrowing owl, and desert tortoise.
Nov. 2002	EnviroPlus Consulting Ridgecrest, CA	Monitored restoration of a 6 mile water line ROW in Victorville, CA. In addition to restoration monitored for sensitive species, Mojave ground squirrel, burrowing owl, and desert tortoise.
Nov. 2002	Chambers Group Irvine, CA	Supervised crew and monitored restoration of a 32 mile gas transmission line ROW between Adelanto and Kramer Junction, CA. In addition to restoration monitored for sensitive species, Mojave ground squirrel, burrowing owl, and desert tortoise.
Oct. 2002	Center for Sustainable Environments Northern Arizona University Flagstaff, AZ	Principle Investigator, Organized and supervised 25 person field crew to train Indigenous Group on Desert Tortoise Resource Management and Handling Techniques, Conducted Tortoise Mortality Survey on two 1km ² study plots on Seri Indian lands in Sonora, Mexico.
June –Nov. 2002	EnviroPlus Consulting Ridgecrest, CA	Biological Monitor, Species of concern: Desert tortoise, Mojave ground squirrel, Burrowing owl; Installation of 24” natural gas line from Adelanto to Kramer Junction, CA
May 2002	Alice Karl & Associates, Davis, CA	Desert tortoise demographic and health study at two 1.5 km ² study sites located within the proposed expansion area of Fort Irwin NTC. Marked, measured and weighed desert tortoises encountered.
May 2002	EnviroPlus Consulting Ridgecrest, CA	Wildlife Biologist, Conducted presence/absence surveys for desert tortoises on a proposed housing development in the Indio Hills, Riverside, Co.
May 2002	EnviroPlus Consulting Ridgecrest, CA	Wildlife Biologist, Conducted clearance survey for desert tortoise, cacti and <i>Yucca</i> sp. along a 5-mile high-power transmission line, Moapa, NV.
April 2002	EnviroPlus Consulting Ridgecrest, CA	Wildlife Biologist, Supervised crew conducting intensive preconstruction surveys along a 32-mile gas line corridor from Adelanto to Kramer Jct., CA, Species of concern: Desert tortoise, Burrowing owl, Mojave ground squirrel, Joshua tree and all cacti species.
Jan. 2002-March 2002	AMEC Earth and Environmental San Diego, CA	Biological Monitor, Species of concern: Desert tortoise, Mojave ground squirrel, Burrowing owl; Installation of 30” natural gas line from Adelanto to Kramer Junction, CA
Oct. 2001	Center for Sustainable Environments Northern Arizona University Flagstaff, AZ	Principle Investigator, Trained Indigenous Group on Desert Tortoise Resource Management and Handling Techniques, Established Six Permanent Study Areas for Ongoing Research on Seri Lands, Conducted Tortoise Mortality Survey on km ² study area on Tiburon Island, Gulf of California. Sonora, Mexico
Aug. 2001	EnviroPlus Consulting Ridgecrest, CA	Biological Monitor, Species of concern: Desert tortoise, High Desert Power Project, San Bernardino Co., CA
July-Aug. 2001	U.S.D.I. Bureau of Land Management, Barstow, CA	Biologist, conducted 200 of 1500 desert tortoise density estimate transects throughout the West Mojave Desert to establish baseline data for developing a West Mojave Management plan. San Bernardino, Co. CA
June 2001	Endangered Species Recovery Program, California State University, Stanislaus, Stanislaus County, Ca	Conducted desert tortoise surveys along proposed expansion of Hwy 395 near Olancha, CA

May-June 2001	Charis Inc., Barstow, CA	Desert tortoise demographic and health study at six 1 km ² study sites located within the proposed expansion area of Fort Irwin NTC. Marked, measured and weighed desert tortoises encountered.
April 2001	Alice Karl & Associates, Davis, CA	On site designated biologist. Managed environmental monitoring team for installation of a natural gas power plant in Blythe, CA. Authorized to move desert tortoises from project site.
May-Dec. 2000	North State Resources, Redding, CA	Environmental Compliance Monitor. Fiber optic cable installation. Issues of concern included erosion control, protection of coastal dune scrub, wetlands, breeding birds, and the endangered Morro shoulder-banded snail. Coordinated implementation and maintenance of overland restoration, San Luis Obispo Co., CA.
May 2000	North State Resources, Redding, CA	Conducted a clearance/salvage survey for the Morro shoulder-banded snail in San Luis Obispo County, CA
March 2000	Death Valley National Park, Death Valley, CA	Biologist, conducted a desert tortoise survey for a road realignment project and 10 desert tortoise density estimate transects, Death Valley National Park, CA
Jul.-Sept. 1999	U.S.D.I. Bureau of Land Management, Barstow, CA	Biologist, conducted 200 of 1400 desert tortoise density estimate transects throughout the West Mojave Desert to establish baseline data for developing a West Mojave Management plan. San Bernardino, Co. CA
Aug.-Sept. 1998	U.S. Geological Service, Biological Resource Division, Riverside, CA	Biologist, conducted 200 of 1000 desert tortoise density estimate transects throughout the West Mojave Desert to establish baseline data for developing a West Mojave Management plan. San Bernardino, Co. CA
Jan.-March 1998	North State Resources, Redding, CA	Environmental Compliance Monitor, Spread Leader. Training and supervision of monitors on fiber optic line. Species of concern: Desert tortoise, San Bernardino Co., CA
Sept. 1997	BBJ Mining Co., San Juan Capistrano, CA	Biological Consultant, Presence/Absence survey for the desert tortoise, Death Valley National Park, CA
March-July 1997	National Biological Service, Riverside, CA	Lead Biologist, Desert tortoise demographic and health study, Fort Irwin NTC, CA
May 1997	Desert Tortoise Preserve Committee, San Bernardino, CA	Biologist, Desert tortoise demographic and health study, Desert Tortoise Natural Area, CA
Nov. 1996	Death Valley National Park, Death Valley, CA	Biological Consultant, Conducted transects throughout the DVNP to determine locations of local desert tortoise populations
Sept. 1996	University of Arizona, Tucson, AZ	Biologist, Desert tortoise demographic study, Organ Pipe National Monument, AZ
May-Sept. 1996	National Biological Service, Riverside, CA	Biologist, Desert tortoise demographic and health study, Fort Irwin NTC, CA
Sept.-Oct. 1995 May-June 1996	Desert Tortoise Preserve Committee, San Bernardino, CA	Biological Monitor, Species of concern: Desert tortoise, Harper Lake Road, San Bernardino Co., CA
May 1995	National Biological Service, Riverside, CA	Biologist, Desert tortoise demographic and health study, Upper Ward Valley, San Bernardino Co., CA
March-Apr. 1995	Lake Mead National Park, Boulder City, NV	Biologist, Desert tortoise demographic and health studies at three sites within the LMNP
Aug.-Sept. 1994	Arizona Game and Fish Department, Phoenix, AZ	Biologist, Desert tortoise demographic and health study, Little Shipp Wash, Yavapai Co., AZ
Aug. 1994	Dames & Moore, Tucson, AZ	Biologist, Testing method for estimating desert tortoise densities, Luke Air Force Base, AZ
Apr. 1994	Nevada Division of Wildlife, Las Vegas, NV	Technician, Set up three desert tortoise study plots in Southern NV
Apr.-June 1994	National Biological Service, Riverside, CA	Biologist, Desert tortoise demographic and health study, Goffs, Lucerne Valley, Johnson Valley, San Bernardino Co., CA
Feb.-March 1994	LSA Associates, Inc., Pt. Richmond, CA	Environmental Compliance Monitor, natural gas line; Species of concern: desert tortoise, Imperial Co. CA

Oct. 1993	University of Arizona, Tucson, AZ Arizona Game and Fish Heritage Grant Recipient: Elizabeth Wirt	Biologist, Assisted in locating desert tortoises for reproduction study, Maricopa Mnts, Maricopa Co. AZ
Aug.-Oct. 1993	Arizona Game and Fish Department, Phoenix, AZ	Biologist, Desert tortoise demographic and health study, Granite Hills, Pinal Co., AZ
July 1993	Pacific Southwest Biological Survey, San Diego, CA	Biologist, Presence/Absence survey for desert tortoises, Little Morongo Canyon, San Bernardino Co., CA
March-May 1993	Desert Tortoise Preserve Committee, San Bernardino, CA	Naturalist (part time), Provide public education, Desert Tortoise Natural Area, San Bernardino Co., CA
March-May 1993	National Biological Service, Riverside, CA	Biologist, Desert tortoise demographic and health study, Desert Tortoise Natural Area and Fremont Peak, San Bernardino Co., CA
Feb. 1993	LSA Associates, Inc., Pt. Richmond, CA	Biologist, Desert tortoise survey on proposed natural gas line, Chocolate Mountain Gunnery Range, San Bernardino Co., CA
Feb. 1993	Ogden Environmental, San Diego, CA	Biologist, Desert tortoise survey on proposed utility corridor, Marine Corps Air Ground Combat Center, Twenty-nine Palms, CA
Sept. 1992	Arizona Game and Fish Department, Phoenix, AZ	Biologist, Desert tortoise demographic and health studies at three study sites in southern AZ
March-July 1992	Bureau of Land Management, Riverside, CA	Biologist, Sheep grazing effects on desert tortoise habitat, San Bernardino Co., CA
July 1992	City of Twenty-nine Palms, CA	Biologist, Presence/Absence survey for desert tortoises, City of Twenty-nine Palms, San Bernardino Co., CA
Sept.-Oct 1991	Arizona Game and Fish Department, Phoenix, AZ	Biologist, Desert tortoise demographic and health studies at three study sites in southern AZ
June-July 1991	Dames and Moore, Las Vegas, NV	Environmental Compliance Monitor, natural gas line; Species of concern: desert tortoise, San Bernardino Co., CA
May 1991	University of Arizona, Tucson, AZ	Volunteer Research Assistant, Desert tortoise habitat selection study, Buckskin Mnts., Mohave Co., AZ

References and Report and Publication list available upon request.