# STEPHANIE F. DUNBAR-CO

# **EDUCATION**

PhD – "Island evolution: phylogeny, adaptive radiation, and biogeography of *Plantago* (Plantaginaceae) in the Hawaiian Islands"

University of Hawai'i at Mānoa; Botany Department; Ecology, Evolution, and Conservation Biology Specialization

MSc – "Evolutionary and biogeographic patterns in *Plantago* (Plantaginaceae) in the Hawaiian Islands"

University of Hawai'i at Mānoa; Botany Department; Ecology, Evolution, and Conservation Biology Specialization

BA – Biology Major, Chemistry Minor University of San Diego, Honors Program School for Field Studies, Queensland, AUS

High School Seabury Hall, Makawao, HI

### WORK EXPERIENCE

# EAST SLOPE PROJECT MANAGER

The Nature Conservancy, Moloka'i Program

- Develop and oversee forest conservation actions in the EMoWP's East Slope management area
- Engage and collaborate with East Slope landowners, community members, and agency partners in project development and implementation

### EAST SLOPE CONSULTANT

Hawai'i Community Foundation Funded State of Hawai'i DLNR/DOFAW Contractor

- Initiate, design and develop a 10-year management plan for the East Slope
- Engage and collaborate with East Slope landowners, community members, and the EMoWP in project design, development, and implementation
- Write and manage grants

# **BOTANICAL CONSULTANT**

Dunbar & Co, Inc.

- Secure contracts
- Perform botanical surveys for EAs and EISs
- Conduct field work throughout the MHI
- Competent in identifying a broad list of plant species in the field

# ALA PĀLA'AU PROJECT PLANNER

Ke 'Aupuni Lōkahi, Inc.

Designed a trail and native plant restoration project at Pāla'au State Park

- Performed community outreach
- Wrote Environmental Assessment and 5-year management plan







# FIELD BOTANIST

Plant Extinction Prevention Program, DLNR/USFWS



- Surveyed areas on O'ahu for endangered plant species
- Monitored populations of endangered plant species in remote locations
- Collected material for ex situ propagation
- Highly competent in identifying endangered plant species in the field

## VOLUNTEER EXPERIENCE

#### PROGRAM MANAGER

Kainalu Ranch

2007-Present

- Lead strategic planning for Kainalu Ranch
- Assist with the development of two conservation easements (FRPP, closed 2007; Forest Legacy, in process)
- Lead native plant restoration (grant management, plant acquisition, site preparation, planting, monitoring)
- Engage with the East Molokai community and agency and business partners

**TEACHER** 

Kamehameha Schools

May 2007

Oʻahu, HI

Taught high school freshman about plant species and communities occurring in and around Kawainui Marsh, Oʻahu

**TEACHER** 

DNA Kids, UH CTHAR

Spring 2007

Oʻahu, HI

Taught elementary school students aspects of basic molecular biology

# THE NATURE CONSERVANCY VOLUNTEER

Alien Algae Clean-Up

2003-2008

Honolulu, HI

- Assisted in the removal of alien algae from O'ahu's reefs and beaches
- Competent in identifying native and alien algae species

**TEACHER** 

Summer 2003 Palmyra Atoll

NSF GK-12 Graduate Fellowship Program

Taught high school students aspects of botany and conservation biology

on Palmyra Atoll

Summer 2002

American Samoa

# BOTANIST National Tropical Botanical Garden

- Surveyed Pisonia grandis forests on Ta'u for National Park of American Samoa
- Provided habitat descriptions, species lists, and voucher specimens

## **PROFESSIONAL INTERESTS**

Conservation project design and development, Island evolution, Pacific island floras, Natural resources management, Population genetics, Ahupua'a (place) based management, Holistic animal husbandry.

# **SKILLS**

- Computer literate in Word, Excel, PowerPoint, Keynote, various email software programs
- Proficient in the statistical softwares Minitab and Sigma Plot
- Extensive field skills including plant identification, restoration, maintenance, monitoring, and specimen collection
- Effective communication skills including proposal grant writing, management plans, scientific publications, and public speaking

# MAJOR GRANTS/AWARDS

University of Hawai'i Graduate Division's 'Ōiwi Ake Akamai Doctoral Completion Fellowship	UH Mānoa
Environmental Protection Agency STAR: GRO Graduate Fellowship entitled, "Island evolution: phylogeny, adaptive radiation and island biogeography of <i>Plantago</i> (Plantaginaceae) in the Hawaiian Islands." (PhD degree)	UH Mānoa
DLNR/DOFAW Safe Harbor Agreement Grant for <i>Pritchardia munroi</i> restoration on private lands.	Molokaʻi, HI
Environmental Protection Agency STAR: MAI Graduate Fellowship entitled, "Evolutionary and biogeographic patterns in <i>Plantago</i> (Plantaginaceae) in the Hawaiian Islands." (MSc degree)	UH Mānoa
Graduate of the Honors Program	USD
Departmental Honors in Biology	USD
Presidential Scholar and Dean's List	USD

#### **PUBLICATIONS**

- Dunbar-Co, S. and A.M. Wieczorek. 2011. Genetic structure among populations in the endemic Hawaiian *Plantago* lineage (Plantaginaceae): insights from microsatellite variation. *Plant Species Biology* 26(1): 134-144.
- Dunbar-Co, S., L. Sack, and Margaret Sporck. 2009. Leaf trait diversification and design in seven rare taxa of the Hawaiian *Plantago* radiation. *International Journal of Plant Sciences* 170(1): 61-75.
- K. Wolff and S. Dunbar-Co. 2009. Cross species amplification of primers developed from *Plantago major* and *P. intermedia* in two Hawaiian *Plantago* species from the section *Plantago*. *Molecular Ecology Resources* 981-984.
- Dunbar-Co, S., A.M. Wieczorek, and C.W. Morden. 2008. Molecular phylogeny and adaptive radiation of the endemic Hawaiian *Plantago* species (Plantaginaceae). *American Journal of Botany* 95(9): 1177-1188.
- Dunbar, S.F. 2006. Phylogeny and evolution of *Plantago* (Plantaginaceae) in the Hawaiian Islands. *Pacific Science* 60(2): 305-314.
- Hoggard, R.K., N. Rønsted, S.F. Dunbar, P.J. Kores, and W.J. Nilsen. 2003. The origin and biogeography of the Hawaiian and South Pacific Ocean island endemic species of *Plantago* section *Plantago*. Botany 2003

  Abstracts, Botanical Society of America.
- Dunbar-Co, S., D.L. Lorence, and C.W. Morden (in prep.). A revision of the Hawaiian *Plantago* (Plantaginaceae) radiation.

# INVITED CONFERENCES AND PRESENTATIONS

- Dunbar-Co, S. The East Slope Update. East Molokai Watershed Partnership Annual Partners Meeting. Molokai, HI. August 8, 2014.
- Dunbar-Co, S. Bridging agriculture and conservation on private land. Hawai'i Conservation Conference. Honolulu, HI. July 16, 2014.

- Dunbar-Co, S. The East Slope: the proposed expansion of the East Molokai Watershed Partnership. 'Aha Kiole Community Meeting. Molokai, HI. September 20, 2013.
- Dunbar-Co, S. and E. Co. Kainalu Ranch: making a living out of a way of life. Kamehameha School Land Assets Division, Hawai'i Investment Ready Incubator Program. Honolulu, HI. August 23, 2013.
- Dunbar-Co, S. The East Slope. East Molokai Watershed Partnership Annual Partners Meeting. Molokai, HI. August 9, 2013.
- Dunbar-Co, S. The East Slope: the proposed expansion of the East Molokai Watershed Partnership. 'Aha Kiole Council Meeting. Molokai, HI. April 2, 2013.
- Dunbar-Co, S. Management planning for additional lands to the East Molokai Watershed Partnership. East Molokai Watershed Partnership Annual Partners Meeting. Molokai, HI. August 10, 2012.
- Dunbar-Co, S. Rare plant restoration on private land: a landowner's perspective. Hawai'i Conservation Conference. Honolulu, HI. August 2-5, 2011.
- Dunbar-Co, S. and A.M. Wieczorek. The role of molecular systematics in the conservation of rare species: a case study of *P. princeps* var. *princeps* on O'ahu. Hawai'i Conservation Conference. Honolulu, HI. July 26, 2007.
- Dunbar-Co, S., A.M. Wieczorek, and C.W. Morden. New islands, new species: a case study of *Plantago* (Plantaginaceae) in the Hawaiian Islands. Evolution Meetings. Christchurch, NZ. June 18-21, 2007.
- Dunbar-Co, S., L. Sack, and M. Sporck. Leaf trait diversification and design in seven Hawaiian *Plantago* taxa radiated across habitats. University of Hawai'i Botany Seminar Series. Honolulu, HI. April 28, 2007.
- Dunbar-Co, S., A.M. Wieczorek, and C.W. Morden. The importance of taxonomy in representing biodiversity: one *Plantago*, two *Plantago*, three *Plantago*, more? Hawai'i Conservation Conference. Honolulu, HI. July 26-28, 2006.
- Dunbar, S.F. and C.W. Morden. A DNA library of Hawaiian plants for taxonomic and natural products research. XVII International Botanical Congress. Vienna, Austria. July 17-23, 2005.
- Dunbar, S.F. Phylogeny and evolution of *Plantago* (Plantaginaceae) in the Hawaiian Islands. 30th Annual Albert L. Tester Memorial Symposium. Honolulu, HI. March 16-18, 2005.
- Dunbar, S.F. Island evolution: Speciation and phylogeny of *Plantago* (Plantaginaceae) in the Hawaiian Islands. Environmental Protection Agency STAR Graduate Fellowship Conference. Washington D.C. October 14-16, 2004.