

Title: Collaborating to Conserve Crop Wild Relatives

Presentation Abstract: Natural areas provide many important benefits including biodiversity conservation, ecosystem services, food, extractive resources, and recreation. Most protected areas harbor crop wild relatives, the wild plants useful to food and agriculture. Crop wild relatives are critical for global food security because their genetic resources improve crop quality, yield, resistance to pests and pathogens, and adaptation to changing climates. There are over 600 native crop wild relatives in the US, over half of which were recently determined to be urgent priorities for conservation. Despite this need, the conservation of crop wild relatives often falls outside the focus of both natural resources and agricultural professionals. The USDA-ARS (US Department of Agriculture Agricultural Research Service) Plant Exchange Office has been actively engaged in the complementary conservation (in situ and ex situ) of crop wild relatives. A key component of the Plant Exchange Office's five-year strategic plan is expanding collaborations to better protect crop wild relatives. This presentation will focus on the important crop wild relatives of the United States, current gaps in their conservation, tools to help land managers, and collaborative conservation efforts. Selection criteria for designating in situ reserves will be reviewed using case studies of cranberry, native grapes, and the Wild Chile Botanical Area. The presentation will conclude with a discussion on opportunities for collaboration.



Photo Provided by Anne Frances

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Anne Frances is a botanist with the USDA-ARS National Germplasm Resources Laboratory in Beltsville, MD, where she develops and implements projects that conserve plant genetic resources. Her research interests include crop wild relatives, ethnobotany, native plant conservation, and restoration ecology. Previously, she served as NatureServe's Lead Botanist for almost 11 years, where she focused on conserving rare plants in the United States and Canada. She currently serves as the North America Plant Red List Authority and has collaborated on many conservation status assessment projects including Trillium, U.S. trees, and the Global Cactus Assessment. Anne worked as a field botanist for Fairchild Tropical Botanic Garden and the Institute for Regional Conservation in Florida and conducted field work in Costa Rica. She is a native of Miami, FL with educational degrees from University of North Carolina at Chapel Hill (BA), Florida International University (MS) and the University of Florida (PhD).