

2017 BONFILS-STANTON SERIES

Ebb & Flow

Water in the Semi-Arid West

DENVER BOTANIC
GARDENS

“Water, water, water...There is no shortage of water in the desert but exactly the right amount, a perfect ratio of water to rock, water to sand, insuring that wide free open, generous spacing among plants and animals, homes and towns and cities, which makes the arid West so different from any other part of the nation. There is no lack of water here unless you try to establish a city where no city should be.”
– Edward Abbey, *Desert Solitaire: A Season in the Wilderness*

With the support of the Bonfils-Stanton Foundation and in line with the Gardens’ mission of connecting people with plants, we are excited to bring you a series designed to explore water as it relates to our ability to thrive in Colorado’s dry environment.

Throughout the 2017 series, we explore the importance of water through the lens of art, conservation, home ownership and gardening. The lecture series includes topics such as enhancing the abundance of water throughout the world, rock gardening and water quality of the Colorado River through underwater photography. A parallel series of intimate workshops, tours and trips further the exploration. [Visit the Gardens’ Bonfils-Stanton Lecture Series webpage at botanicgardens.org/bonfils-stanton](http://botanicgardens.org/bonfils-stanton) for more information.



APRIL



RESOURCE HARVESTING FOR DYNAMIC GARDENS AND NEIGHBORHOODS: SIMPLE AND EFFECTIVE WAYS TO ENHANCE THE NATURAL ABUNDANCE OF YOUR HOME, GARDEN AND BEYOND

Brad Lancaster
Thursday, April 20, 6:30-8 p.m. Food tasting at 6 p.m. | \$20, \$15 member

This dynamic presentation shares strategies to harvest, integrate and enliven free local resources such as rain, grey- and storm waters; sun, wind and shade; along with soil fertility, wild foods and community fun. This

talk is both an invitation to engage and partner with natural surroundings and the community, and a treasure map showing the way by planting the rain, dancing with the sun, growing fertile shade and more. A book signing follows the lecture.

BRAD LANCASTER is the author of the award-winning “Rainwater Harvesting for Drylands and Beyond” and co-founder of DesertHarvesters.org. Since 1993, Lancaster has run a successful permaculture education, design and consultation business focused on integrated regenerative approaches to landscape design, planning and living. In the Sonoran Desert, with just 1.1 inches of annual rainfall, he and his brother harvest about 100,000 gallons of rainwater a year on an eight-acre urban lot and adjoining right-of-way. This water is used to support food-bearing shade trees, gardens and a landscape that supplies wildlife habitat, beauty, medicinal plants and more. Lancaster seeks to empower clients and the community to make positive change in their lives and neighborhoods by using natural resources.

TOUR: GREEN ROOFS

Thursday, April 20, 4:15 & 5:15 p.m. | \$12, \$10 member

Denver Botanic Gardens’ Horticulturist Amy Schneider leads a tour of the Gardens’ Green Roof, Denver’s first green roof on a city-owned building. Completed in 2007, the project was designed to be publicly accessible, interpretive and educational, demonstrating the many environmental and community benefits of green roofs.

WORKSHOP: PLANTING THE RAIN: INTEGRATED WATER HARVESTING SYSTEMS

Friday, April 21, 9 a.m. – 4 p.m. | \$59, \$56 member

“Plant the rain” before you plant your trees and other vegetation to boost production, enhance soil fertility, reduce flooding, conserve water and create sustainable oases around your home’s and community’s infrastructure. Existing landscapes can be retrofitted to achieve similar benefits. Rain gardens and small-scale water-harvesting earthworks are legal and cheap. Brad Lancaster will show how to integrate rainwater tanks with your rain gardens to get the biggest bang for your buck.

WORKSHOP: RAIN BARRELS AT HOME

Friday, April 28, 10 a.m. – noon | \$42, \$36 member

Local water harvesting and permaculture expert Avery Ellis leads this exciting workshop that explores essential rainwater harvesting techniques. Participants learn how to plan for and install a rain barrel on their property, discuss current rainwater Colorado laws, explore passive irrigation strategies and subsurface drains and get hands-on experience.

AVERY ELLIS is a sustainability specialist and ecological designer. He is also a certified permaculture designer, teacher and a certified greywater installer. He has integrated his diverse skills into comprehensive business solutions, which bring science and craftsmanship together in the designs and installations.

MAY



RESTORING NATURE’S RELATIONSHIPS

Doug Tallamy
Thursday, May 18, 6:30-8 p.m. Food tasting 6 p.m. | \$20, \$15 member

Specialized relationships between animals and plants are the norm in nature rather than the exception. Doug Tallamy explains how specialized food relationships determine the stability and complexity of local food webs and how we can use residential landscapes to connect isolated habitat fragments and produce valuable ecosystem services. A book signing follows the lecture.

DOUG TALLAMY is a professor in the department of entomology and wildlife ecology at the University of Delaware, where he has authored 85 research publications and has taught insect taxonomy, behavioral ecology, humans and nature, insect ecology and other courses for 35 years. His research goal is to better understand how insects interact with plants and how such interactions determine the diversity of animal communities.

TOUR: BIRDS AND BEES WALK

Thursday, May 18, 4:15 & 5:15 p.m. | \$12, \$10 member

A tour of the Gardens’ Birds and Bees Walk led by Horticulturist Sonya Anderson explores the woodland path to discover plants and design geared towards attracting birds, butterflies and hummingbirds.

[SEE MORE MAY PROGRAMMING ON NEXT PAGE](#)



PHOTO: JOSEPH TYCHONIEVICH

MAY (CONT'D)

WORKSHOP: NATIVE POLLINATOR HABITATS

Friday, May 19, 9 a.m. – 1 p.m. | \$46, \$42 member

The work of pollinators impacts us through the food we eat. According to the Xerces Society, there are 4,000 species of native bees in North America, forming the most important group of pollinators. They require a source of food, water and shelter and are affected by changes in landscapes, especially the loss of nesting sites. Participants of this hands-on workshop create a nesting box to replicate some of the wildness that makes bees comfortable enough to nest in your landscape.

PATTI O'NEAL has been an instructor at the Gardens since 2000, specializing in sustainable vegetable gardening. She has been a featured speaker at regional conferences and organizations. She is a horticulturist for Colorado State University, focusing on food systems and urban agriculture and she coordinates the Master Gardener program for Jefferson County.



ROCK GARDENING: REIMAGINING A CLASSIC STYLE

Joseph Tychonievich

Thursday, May 25, 6:30-8 p.m. Food tasting 6 p.m. | \$20, \$15 member

Inspired by the tiny plants and dramatic landscapes found on mountain tops, rock gardening uses a range of unusual plants in combination with beautiful stones to create miniaturized landscapes. In this talk Joseph Tychonievich shares how this approach to gardening is water-wise, perfect for containers, small gardens and for gardeners interested in exploring a whole new group of beautiful plants. A book signing follows the lecture.

JOSEPH TYCHONIEVICH is a southeast Michigan resident who was named by Organic Gardening Magazine as one of "...six young horticulturists who are helping to shape how America gardens." He is the author of "Plant Breeding for the Home Gardener" and "Rock Gardening: Reimagining a Classic Style."

TOUR: ROCK ALPINE GARDEN

Thursday, May 25, 4:15 & 5:15 p.m. | \$12, \$10 member

Denver Botanic Gardens' Curator of Alpine Collections Mike Kintgen leads a tour of the Gardens' Rock Alpine Garden near its flora peak and shares how participants can create some of this beauty in their yard.

WORKSHOP: TROUGH GARDEN PLANTING

Friday, May 26, 9-11 a.m. | \$56, \$52 member

Trough gardens are a perfect way to dip your toes into the fascinating and water-wise world of rock gardening. In this workshop, Joseph Tychonievich goes over the basic techniques of creating a beautiful and healthy trough garden and the participants make a trough garden to take home.



JUNE

WORKSHOP: RESIDENTIAL GREYWATER REUSE

Friday, June 2, 9 a.m. – 4 p.m. | \$56, \$53 member

This hands-on workshop shares easy ways to reuse greywater. Learn about the different types of collection systems, design and installation considerations so you can build a system at home to lower your water bill and grow happy plants. Participants will install a Laundry 2 Landscape greywater system.



WATER FLOW: UNDER THE COLORADO RIVER

Kathleen Velo

Thursday, June 15, 6:30-8 p.m. Food tasting 6 p.m. | \$20, \$15 member

Learn about the Colorado River in a way you've never imagined! Kathleen Velo discusses her project "Water Flow: Under the Colorado River," a series of color photograms created under the water's surface. This photographic project spans the entire river, from the headwaters in northern Colorado through five states into Mexico, where the river ends short of the Sea of Cortez. Hear about the adventures and challenges of creating these beautiful photograms, which explore water quality concerns and the transience of one of the most important rivers in the United States.

KATHLEEN VELO is a photographic artist who uses non-traditional media and cameraless processes to explore water quality and environmental issues. Her work has been exhibited nationally and internationally and is in numerous public and private collections. She is the recipient of various grants and awards including artist project grants from the Fulbright commission, the United States Department of State and the Arizona Commission on the Arts.

WORKSHOP: ALTERNATE PHOTOGRAPHIC BOTANICS

Friday, June 16, 9:30 a.m. – 1 p.m. | \$46, \$42 member

In this hands-on workshop, Kathleen Velo introduces the photogram process, a camera-less photographic technique that she used for her project, "Water Flow: Under the Colorado River." Create cyanotypes of foliage similar to the process used in the mid-1800s by Anna Atkins in the first book to include photographic illustrations of plants. Learn to coat paper with simple light sensitive materials, arrange unique compositions of common plants and expose them to light; once processed, the resulting images becomes beautiful cyanotypes.



PHOTO: CENTENNIAL CANOE OUTFITTERS INC.

TOUR: 2017 WATER-WISE GARDEN TOUR

Saturday, June 17, 10 a.m. – 3 p.m. | \$10

Interested in how to create a garden that will use less of Colorado's precious water supply? Join this self-guided tour of local urban water-wise gardens. See how Denverites have creatively used native and low water use plants, greywater and harvested water to grow beautiful landscapes. Every garden boasts water conservation through the extensive use of mulch and hand-dug earthworks infiltrating the rain to grow diverse drought-tolerant edible perennials. This self-guided tour is open house style. Participants receive a map with marked tour stops and descriptions of each garden.

TOUR: 2017 HORTICULTURE HOME AND GARDEN TOUR: HABITAT HEROES

Friday, June 23, 9 a.m. – 1 p.m. or 1-5 p.m. | \$51, \$46 member
Includes lunch and transportation from Denver Botanic Gardens

A Habitat Hero is a gardener who, certified by the Audubon Society, includes diverse planting layers through the use of native and regionally adapted plants, provides shelter and nesting opportunities, offers natural food and water sources, does not spread invasive species of plants and does not rely on the use of chemical fertilizers and pesticides. Come see three of the best and most diverse examples of Habitat Heroes gardens throughout the Denver-metro area.

JULY

TRIP: PHOTOGRAPHING MOUNTAIN LAKES AND LANDSCAPES

Friday–Sunday, July 14-16. 10 a.m. – 3 p.m. | \$675, \$625 member, single room
\$525, \$475 member, double room

Lakes, rivers and waterfalls: Vail offers a great diversity of water features and sublime opportunities to photograph the mountains at their finest. Join Scott Dressel-Martin, Denver Botanic Gardens' official photographer, for a multi-day photography excursion to Vail, Colorado. Take photographs, eat and explore our way through a myriad of visual offerings.

AUGUST

TRIP: NATURE'S ADAPTATIONS: RIVER TO DESERT

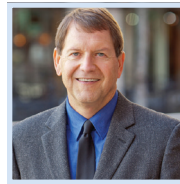
Friday–Sunday, August 4-6 | \$450, \$420 member

The Gardens and Centennial Canoe Outfitters, Inc. lead a leisurely, guided and outfitted 31-mile canoe trip through the Escalante and Dominguez Canyons Wilderness Area on the Gunnison River. Paddle beside high walls of beautiful red sandstone and shale deposited during the age of the dinosaurs. Interesting side trips into deep box canyons display the immensity of geologic time and the silence of the wilderness. Massive cottonwood trees stand on the river bends supporting huge nests of blue herons, hawks and eagles. In addition to the guides, the trip is led by naturalist Karen Caddis, who has over 25 years of experience in wetland ecology. Learn about the ecology along the river, including aquatic animals and plants. No canoeing experience is necessary.

COLORADO FOODWAYS (CHATFIELD FARMS)

Saturday, August 12, 5:30 p.m. | \$42, \$39 member

Chatfield Farms' annual celebration of Colorado history, music and food featuring local chefs, tours and live music. Traditional Colorado dishes with regionally sourced ingredients are presented during this "strolling supper" on the farm. Participants can tour the organic vegetable and lavender fields, explore the historical Hildebrand Ranch house, and hear a talk on water conservation. This year, guests can also enjoy a tour of the riparian conservation and restoration efforts in process at Chatfield Farms by research staff. Food and beverage are included. This event sells out quickly.



TALK & PANEL: WHERE DOES YOUR WATER COME FROM?

Thursday, September 7, 6:30-8 p.m. | \$20, \$15 member

Do you know that 50% of the water used in Denver comes from the Colorado River on the Western Slope? A presentation by Tom Cech from the One World One Water Center at Metropolitan State University of Denver is followed by a panel discussion with water experts from the Denver area. A Q&A session concludes the event.

TOM CECHE was executive director of the Central Colorado Water Conservancy District in Greeley, taught undergraduate and graduate level water resources courses at the University of Northern Colorado and Colorado State University, and is now the director of the One World One Water (OWOW) Center for Urban Water Education and Stewardship at MSU Denver. Cech wrote "Principles of Water Resources: History, Development, Management and Policy," "Introduction to Water Resources and Environmental Issues," (co-author Dr. Karrie Pennington) and "Colorado Water Law for Non-Lawyers," (co-author P. Andrew Jones).

WORKSHOP: SUCCULENT LIVING FRAME

Friday, September 8, 9 a.m. – 1 p.m. | \$85, \$80 member

Learn how to design, build and plant a living succulent frame. These wonderful water-wise plants with a diversity of shapes and textures can set your imagination on fire! Learn about succulent care, propagation techniques, succulent varieties and principles of design. Complete playful and reflective writing activities, coloring and wordplay. Students are asked to bring an empty 8x10 frame, all students will take home a living succulent frame.

CHRISTINE BAYLES KORTSCH, PH.D. teaches literature and writing at the Rocky Mountain College of Art and Design and the University of Baltimore.

WORKSHOP: GROW YEAR-ROUND WITH AQUAPONICS

Friday, September 15, 9 a.m. – 3 p.m. | \$53, \$49 member

This full day workshop with Avery Ellis teaches how to grow organic vegetables and fish year-round! The workshop includes a tour of an aquaponics farm and several home solutions. Learn about the benefits of aquaponics including: fish and plant selection and health, system cycling, bacteria and the nitrification cycle, system design ratios, different system designs (flood and drain, deep water culture and vertical systems), growbed styles, media, pumps, aerators, plumbing fittings, system management and optimization.



THE SUMMER-DRY GARDEN

Saxon Holt

Thursday, September 28, 6:30-8 p.m. Food tasting 6 p.m. | \$20, \$15 member

Successful and sustainable gardens must conform to natural precipitation cycles and the plants we use should not be drought tolerant, but climate tolerant. In a summer-dry climate, long summers with no rain is not drought, it is normal. This photo-driven lecture illustrates how gardens in dry climates can be beautiful when good plant choices are combined with simple design techniques. A book signing follows the lecture.

SAXON HOLT is a professional garden photographer and has photographed for 25 books including "Hardy Succulents" by Gwen Kelaidis and "The American Meadow Garden" by John Greenlee. His website, PhotoBotanic.com, is dedicated to his garden photography and self-publishing projects. He is a Fellow of the Garden Writers Association who awarded his e-book, "Good Garden Photography" the best overall garden book of the year in 2015.

SEPTEMBER (CONT'D)

TOUR: WATER-WISE GARDENS

Thursday, September 28, 4:15 & 5:15 p.m. | \$12, \$10 member

Join Dan Johnson, curator and associate director of horticulture, on a tour throughout the Gardens waterwise gardens and talks about specific plants and gardening techniques used to conserve water.

WORKSHOP: PHOTOGRAPHERS HELPING GARDENERS

Friday, September 29, 7 a.m. – 5 p.m. | \$69, \$64 member

Good garden photographers inspire gardeners to mimic what they see. In the morning session, Saxon Holt demonstrates how to tell a photo story about successful garden plantings and in the afternoon session, individual plants are explored with the intention of creating photos that communicate and inspire. Each session is followed by a group critique.

WORKSHOP: THE PHOTO FLORILEGIUM AT CHATFIELD FARMS

Saturday, September 30, 8 a.m. – 5 p.m. | \$69, \$64 member

The observant photographer can reveal details of that beauty and a collected series of plant portraits becomes a florilegium. Saxon Holt teaches how to see the details of plants and techniques for separating them from the landscape to better communicate unique characteristics. The workshop begins with a tour of the landscape, looking for plants that capture our imagination. A lecture follows about photo florilegium techniques. After lunch, each student works with one plant to create a series of photos that describe it and perhaps be the beginning of The Chatfield Farms Photo Florilegium.



PHOTO: SCOTT DRESSEL-MARTIN

3 WAYS TO REGISTER:

ONLINE botanicgardens.org

BY PHONE 720-865-3580

IN PERSON Visitor Center, 1007 York Street
9 a.m. – 5 p.m., daily

Programs, presenters and times are subject to change.
Speaker accommodations generously provided by the Queen Anne Bed & Breakfast.

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