

Below is a list of classes available along with the time they are held.

9:00 a.m.

- ◇ Turf and Weed ID
- ◇ Tree and Shrub ID
- ◇ Irrigation System Efficiency
- ◇ Low Water Ornamental Grasses for Colorado Landscapes

10:10 a.m.

- ◇ Shrub Pruning
- ◇ Plant Health Care Landscape Problems
- ◇ Irrigation System Efficiency
- ◇ Native Grasses in the Urban Landscape

11:20 a.m.

- ◇ Turf and Weed ID
- ◇ Tree and Shrub ID
- ◇ Shrub Pruning
- ◇ Plant Health Care Landscape Problems

1:30 p.m.—2:00 p.m.

- ◇ The Colorado River: Issues and Drought Contingency Planning

2:00 p.m.—2:30 p.m.

- ◇ Irrigation Innovation Consortium

2:30 p.m. - 3:30 p.m.

- ◇ 2019 Insect Update

OPTIONAL TOUR - 3:30 p.m.

The Colorado-Big Thompson Project Interpretive Area

Classes are available on a first come first serve basis.

Morning Sessions

Turf and Weed Identification

Presented by Dr. Tony Koski, CSU Department of Horticulture and Landscape Architecture

Location 3

***Dept. of Ag. credit**

Effective weed management requires that weeds be correctly identified. Once identified, effective cultural and biological management tools can be used. If herbicides (synthetic or natural) will be used, identification of both the weed and host crop (lawn, garden) is essential for using herbicides legally and effectively.

(Presented at 9:00 a.m. AND 11:20 a.m.)

Tree and Shrub ID

Presented by Dr. Jim Klett, CSU Department of Horticulture and Landscape Architecture

Location 4 at 9:00 a.m. AND Location 1 at 11:20 a.m.

*** Dept. of Ag. credit and ** ISA credit**

This session will include a walk around Northern Water Conservancy to discuss trees and shrubs that will add diversity to the plant pallet planted in Colorado. Many could be replacements for ash trees. You will observe first-hand these plants helping you in future identification.

(Presented at 9:00 a.m. AND 11:20 a.m.)

Irrigation System Efficiency

Presented by Chad Kuhnel, Water Efficiency Program, Northern Water

Location 1

Overview of irrigation components and efficient irrigation practices. Look at multi-stream nozzles as an alternative to spray nozzles that can easily be retrofitted in residential irrigation systems, comparing their different precipitation rates, pressure requirements and how to adjust. Preform an irrigation audit on our above ground spray irrigation system to demonstrate ways to test your irrigation systems efficiency.

(Presented at 9:00 a.m. AND 10:10 a.m.)

Low Water Ornamental Grasses for Colorado Landscapes

Presented by Amy Lentz, CSU Extension, Weld County

Location 2

This walking tour will cover various ornamental grasses that are located around the Conservation Gardens and front landscape at Northern Water. These plants are those that thrive in Colorado's semiarid climate and have low water requirements. Ornamental traits, cultural requirements and maintenance will be discussed for a wide variety of ornamental grasses.

Shrub Pruning

Presented by Eric Hammond, CSU Extension, Brighton

Location 4

This session will cover the basics of proper shrub pruning. You will learn how shrubs respond to pruning and the potential benefits and risks of pruning shrubs.

(Presented at 10:10 a.m. AND 11:20 a.m.)

Plant Health Care Landscape Problems

Presented by Mary Small, CSU Extension (retired), and John Stolzle, CSU Extension, Jefferson County

Location 3 at 10:10 a.m. AND Location 2 at 11:20 a.m.

*** Dept. of Ag. credit and ** ISA credit**

Join Mary and John on a walk through Northern Water's landscape to discuss the latest abiotic stresses, insects and diseases affecting Colorado Plants. Mary and John will provide diagnostic tricks and management options for each infection you will encounter.

(Presented at 10:10 a.m. AND 11:20 a.m.)

Native Grasses in the Urban Landscape

Presented by Dr. Tony Koski, CSU Department of Horticulture and Landscape Architecture

Location 2

***Dept. of Ag. credit**

Native grasses are becoming more popular for use in urban landscapes. Some species can be used for lawns, while others are best left unmowed. Attendees will see what these grasses look like mowed and unmowed and learn some tricks for their establishment and maintenance. Weeds are the most common pest problem in native grass stands, so the use of herbicides for weed management in native grasses will be discussed.

Afternoon Sessions

The Colorado River: Issues and Drought Contingency Planning

Presented by Kyle Whitaker, Colorado River Programs Manager for Northern Water

Location: Granby Board Room

The Colorado River, which irrigates 5.5 million acres and provides municipal water supplies to nearly 40 million people in 7 states, is stressed. Sure, it's snowed a lot this year, but ongoing drought, climate change, increasing demand, and managerial complexity are serious challenges for the lifeblood of the west. The presentation will share a who what when where why and how about the river's status, the Drought Contingency Planning, and what it means for Colorado.

Irrigation Innovation Consortium

Presented by Dr. Stephen Smith, Farmer and Founding Director

Location: Granby Board Room

The Irrigation Innovation Consortium (IIC), based at CSU, is a collaborative research effort to accelerate the development and adoption of water and energy efficient irrigation technologies and practices through public-private partnerships. The Consortium has five founding university partners and eight founding industry partners. The Consortium seeks to address growing water scarcity domestically (e.g. western United States) and internationally by enhancing efficiency in irrigated food systems and amenity landscapes.

2019 Insect Update

Presented by Dr. Whitney Cranshaw, CSU Department of Bioagricultural Sciences and Pest Management

Location: Granby Board Room

*** Dept. of Ag. credit and ** ISA credit**

Come and learn about the big, the bad, and the ugly, in terms of insects affecting our landscapes in 2019. Updates about emerald ash borer, Japanese beetle, and more will be discussed, along with on-going and current research in the field of entomology.

The 2019 Twelfth Biennial Short Course

presented by
**Colorado State University Extension
Green Industries of Colorado
Northern Water**

Friday, July 12, 2019

Northern Water
220 Water Avenue
Berthoud, CO 80513



**COLORADO STATE UNIVERSITY
EXTENSION**



2019 SHORT COURSE SCHEDULE

TIME	TITLE	LOCATION	SPEAKER
8:00 to 9:00 AM	Registration	By Parking Lot	
9:00 AM	Irrigation System Efficiency	Location 1	Chad Kuhnel
9:00 AM	Low Water Ornamental Grasses	Location 2	Amy Lentz
9:00 AM *	Turf and Weed ID	Location 3	Dr. Tony Koski
9:00 AM **,**	Tree and Shrub ID	Location 4	Dr. Jim Klett
10:10 AM	Irrigation System Efficiency	Location 1	Chad Kuhnel
10:10AM *	Native Grasses in the Urban Landscape	Location 2	Dr. Tony Koski
10:10 AM **,**	Plant Health Care Landscape Problems	Location 3	Mary Small and John Stolzle
10:10 AM	Shrub Pruning	Location 4	Eric Hammond
11:20 AM **,**	Tree and Shrub ID	Location 1	Dr. Jim Klett
11:20 AM **,**	Plant Health Care Landscape Problems	Location 2	Mary Small and John Stolzle
11:20 AM *	Turf and Weed ID	Location 3	Dr. Tony Koski
11:20 AM	Shrub Pruning	Location 4	Eric Hammond
12:20 to 1:20 PM	Lunch	Building C	
1:30 to 2:00 PM	The Colorado River: Issues and Drought Contingency Planning	Granby Board Room	Kyle Whitaker
2:00 to 2:30 PM	Irrigation Innovation Consortium	Granby Board Room	Dr. Stephen Smith
2:30—3:30 PM **,**	2019 Insect Update	Granby Board Room	Dr. Whitney Cranshaw
3:30 PM	OPTIONAL—The Colorado-Big Thompson Project Interpretive Area	Patio	Northern Water

** These classes qualify for credit through ISA.

* These classes qualify for credit through the Colorado Department of Agriculture.

For more information please call 970-491-8416

Register through Eventbrite:

<https://www.eventbrite.com/e/the-2019-twelfth-biennial-short-course-registration-60871344831?ref=ecount>

Enrollment limited to 100 people

**\$65 Early Bird Registration
due June 21, 2019**

**\$75 Regular Registration
June 22 - July 3, 2019**

**\$85 Walk-Ins
(only if space is available)**

No discount for half day

**No refunds will be issued after
June 21, 2019**

Registration includes lunch. Vegetarian options available. Special dietary requests cannot be accommodated.

Confirmations will only be sent via email

Event will be held rain or shine.

Morning sessions will be held outdoors with limited opportunities to sit. Please wear comfortable walking shoes and a water bottle to fill up at water stations.

Plan to check-in prior to 8:45 a.m. Classes will be begin promptly at 9:00 a.m.

