

# October 8-12, 2018

The sky islands are a group of mountain ranges in Southeastern Arizona that are isolated from each other by desert lowland scrub and grassland plant communities. This area of the southwest is subject to summer monsoon weather patterns that supplies moisture to these isolated mountain ranges. The unique warm and wet climate and relative isolation of these ranges. their unique geological history and the alternating dry and wet patterns have allowed for the development of biodiversity hot spots. The Chiricahua Mountain range is the largest of these sky islands and is the home of the SWRS field station (more on next panel about SWRS). Chiricahua trees are adapted to hot and dry climates and to heavy summer rain as well as occasional winter rain. These qualities make them ideal for study as candidates for cultivation in irrigated arid climate landscapes. The Chiricahuas also offer us a laboratory to examine tree adaptations and natural history up close. The high species diversity, unique landforms, soils, abundance of insects and animals, and sheer beauty of this part of the American Southwest are unlike anything else in the world.

## Registration

Registration includes all meals and lodging (dormitory style), handouts, book, seminars, and field trips for five days. The Meeting is held at the SWRS (Southwestern Research Station) of the American Museum of Natural History, Portal, Arizona. More information about SWRS can be found on their web page at:

## https://www.amnh.org/our-research/southwesternresearch-station/education

The cost for full registration is \$475.00. Additional nights can be arranged with the station if you wish to extend your stay with early arrival or late departure. The nearest airport is in Tucson, approximately a three-hour drive from the west. We will attempt to arrange a shuttle service if enough people require pick up. From the Los Angeles area in California, plan for a 10-12 hour drive. Local attendees can participate in the full program including meals but excluding lodging for \$280. There is a slight cost difference for Sunday versus Monday arrivals. To reserve your spot at the Rendezvous please contact Erinn or Rose at SWRS (520-558-2396) and mail a check made out to SWRS to Southwestern Research Station, PO Box 16553, Portal, AZ 85632. Limited to 40 attendees. Or register immediately using this link: https://www.amnh.org/our-research/southwesternresearch-station/education

Twenty International Society of Arboriculture continuing education credits approved.

# Agenda

#### SUNDAY

Early Arrival Day—Check in at office for room assignment and dinner. **MONDAY** Arrival Day

**7:30 am** Breakfast/registration/arrival and check in. *Relax. You are at the station!* 



#### 12:00 pm Lunch

1:00 pm Chiricahua Mountains Orientation:

•The Cave Creek Area (Speaker TBA)

•SWRS— What is here, station rules, station

boundaries, hikes and trails

**2:00 pm** Exploring the station grounds, creek drainages, canyons, and riparian woodlands **6:00 pm** Dinner

#### 7:00 pm SEMINAR:

Soils of the Chiricahua Mountains, David B. Kelley,

Kelley and Associates Environmental Sciences Inc.

TUESDAY

7:30 am Breakfast 8:30 am SEMINAR: Insects, Ants and Other



Arthropods Associated with Trees in the Chiricahua Mountains, Dr. Michele Lanan, Resident Research Scientist, SWRS

### 10:00 am SEMINAR:

University of California

The Geology of the Sky Islands its Effects on Plants,

David B. Kelley and Associates Environmental Sciences Inc. 12:00 pm Lunch 1:00 pm Field Trip to the South Fork of Cave Creek, *Trees of South Fork.* A five-plus miles easy-walking hike in a creek canyon. 4:00 pm Return from South Fork 6:00 pm Dinner 7:00 pm SEMINAR: *Fungi of the Chiricahua Mountains,* Dr. James Downer,



# WEDNESDAY 7:30 am Breakfast 8:30 am Depart for

Granite Gap Field Trip.



This is a two-mile walk for an exploration of the granite gap area to examine tree adaptations. Hilly terrain, climbing and scrambling is to be expected. 9:00 am Hike at Granite Gap: Trees in a Desert Environment: Drought Survival and Monsoon Restoration

11:15 am Travel back to SWRS **12:00 pm** Lunch

# 1:00 pm SEMINAR:

Dendrochronology Workshop and How to Use an Increment Borer to Evaluate Annular Growth Increments. What does this mean in a location with a monsoon climate system?, Dr. Kevin T. Smith,

**Unites States Forest Service** 

3:00 pm SEMINAR: Pathogens of the Woody Support Systems of Trees, Dr. James Downer, University of California 6:00 pm Dinner 7:00 pm SEMINAR: Physiology of Monsoon Species Trees, Dr. Kevin T. Smith, United States **Forest Service** THURSDAY 7:30 am Breakfast

#### 8:30 am SEMINAR:

Post-Horseshoe II Fire Recovery in the Chiricahua Mountains of South East Arizona, Dr. Jim Malusa, University of Arizona. 9:30 am Depart for Barfoot Park—This is a

moderate, less than a mile hike with elevation changes from 8000 to 8500 feet.





Identification 4:00 pm Return to SWRS 6:00 pm Dinner

# 7:00 pm SEMINAR:

Post Fire

Drought Adaptation Strategies For Trees In The Chiricahua Mountains, Dr. Ursula Schuch, University of Arizona FRIDAY

7:30 am Breakfast 8:30 am SEMINAR:

The Ecology Of Cavity Nesting Birds In Cave Creek Arizona, Dr. Dave Oleyar, Hawkwatch International

# 9:30 am SEMINAR:

Trees of the Chiricahua Mountains and the Potential for Horticultural Selections for California Landscapes, Dr. James Downer, University of California

10:30 am Depart for Chiricahua Monument

**12:00 pm** Lunch at the monument

**1:00 pm** Tour the wonderland of rocks and study trees of the Chiricahua Monument. This is a several mile hike inside the monument, but mostly down hill. 6:00 pm Dinner

## 7:00 pm CLOSING SEMINAR:

Biodiversity within Chiricahua Mountains,

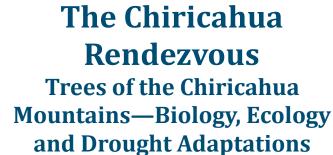
Dr. Carol Simon, Professor Emeritus, City College of the City University of New York with Dr. Howard Topoff,

Professor Emeritus, Hunter College of the City

University of New York

## SATURDAY

7:30 am Breakfast and departure



A meeting of arborists, naturalists, and biologists to study trees and their adaptations in the Chiricahua Mountains of South East Arizona

Dr. James Downer, University of California aidowner@ucdavis.edu Dr. Ursula Schuch, University of Arizona uschuch@email.arizona.edu





It is the policy of the University of California (UC) and the UC Division of Aariculture & Natural Resources not to enaage in discrimination against harassment of any person in any of its programs or activities (Complete nondiscrimination policy statement can be found at http://uca

Inquiries regarding ANR's nondiscrimination policies may be directed to John I. Sims, Affirmative Action Compliance Officer/Title IX Off ersity of California. Aariculture and Natural Resources. 2801 Second Street. Davis. CA 95618. (530) 750-139

