



**National Advanced Fire & Resource Institute**  
Managed By The U.S. Forest Service

3265 East Universal Way, Tucson, Arizona 85756  
Phone 520-799-8787 • Fax 520-799-8785 • [www.nafri.gov](http://www.nafri.gov)

**File Code:** 5100

**Date:** March 11, 2010

**Subject:** M-580 Fire in Ecosystem Management  
April 26 – 30, 2010

**To:** M-580 Course Participant

Congratulations on your selection to attend the M-580 Fire in Ecosystem Management course to be held at the National Advanced Fire and Resource Institute (NAFRI). The course dates are April 26 - 30, 2010. Please note the course starts Monday morning at 0800. Enclosed you will find; the course schedule, faculty, steering committee, and participant rosters, and details on logistics of the course.

**Course Information:**

M-580 begins Monday, April 26 at 0800 in the Sonoran Auditorium. The course ends at 1600 on Friday, April 30. Do not make flight reservation that will interfere with the course times.

M-580 is a national level training course. As such, you can expect long days. You will be expected to attend the entire course.

This course generates various handouts but not a notebook per se. At the end of the course each participant will receive a CD with all lesson plans, most PowerPoint's, and various handouts. There are many instructors for this course and the steering committee feels you can give each instructor your attention without the distraction of looking at documents during the presentations.

Information on the field trip will be sent at a later date.

**Cancellation Policy:**

If for any reason you are unable to attend the course, please let us know. Do not replace yourself.

**Logistics:**

**Course Facility**

Our facility is close to the Tucson International Airport. You can find a map of the area at [www.nafri.gov](http://www.nafri.gov).

**Place:** NAFRI

**Main Phone:** (520) 799-8787

**Address:** 3265 E. Universal Way, Tucson, AZ 85756

**Fax:** (520) 799-8785

**Travel Arrangements**

The course begins on Monday morning, April 26th at 0800. Travel should be scheduled for Sunday, April 25th, 2009. The course ends Friday, April 30th at 1600. When making your return flight arrangements, allow at least 15 minutes from NAFRI to the Tucson International Airport by car.

**Lodging**

For a listing of hotels near NAFRI, go to the main NAFRI website (<http://www.nafri.gov>). Please mention you are with NAFRI.

The hotels and inns located in this area provide a wide variety of amenities suitable for all visitors. The hotels and NAFRI are within one mile of the Tucson airport. Most of the hotels also provide free continental breakfast. Other amenities may be provided based on the individual hotel properties. Be sure to confirm with the hotel when setting up your reservation.


**Transportation**

If you are not renting a car, NAFRI will be providing a van shuttle service to and from the hotels as needed for the course, once in the morning and again after class in the evening. Please call the NAFRI main number (520-799-8787) to make arrangements or go online <http://www.nafri.gov> to sign up for a ride.

**Restaurants**

There are a variety of lunch options within walking distance.

We are looking forward to presenting M-580 here at NAFRI. Please contact Gladys Ross, M-580 Course Coordinator, at 520-799-8753 or by email [gmross@fs.fed.us](mailto:gmross@fs.fed.us) with any questions or concerns about the M-580 Course.

  
MERRIE M. JOHNSON  
Director

## **M-580 FIRE IN ECOSYSTEM MANAGEMENT**

### **COURSE GOALS**

- Convey the significant role of fire management across a diversity of ecosystems.
- Demonstrate the complexity and benefits of integrating fire and vegetation management with social, political, legal, economic and environmental factors.
- Provide participants with strategies, concepts, reference resources, and models to facilitate informed decisions on fire in ecosystem management.
- Review and reinforce fundamental ecological concepts as they relate to fire on the landscape.

### **COURSE DESCRIPTION**

Through lectures, case studies, a field trip, and interaction between participants and faculty, the course:

- Explores the role of fire and fire management in ecosystem management.
- Examines historical, social, political, legal, economic, and environment factors critical to fire management.
- Provides the participants with concepts, technologies and methods to actively engage in fire in ecosystem management across the landscape.

Nationally recognized subject matter experts and practitioners serve as instructors in this course.

The course does not provide a “cookbook” for ecosystem management; rather this course provides concepts, and ecological and social considerations to assist the student with developing specific fire management programs. Local fire effects information and monitoring details are provided in other courses.

### **Target Group**

In general the target audience includes individuals who do not have a comprehensive fire management or fire ecology background.

- Individuals involved with planning, implementation, and monitoring of fire and ecosystem management programs, i.e. natural/cultural resource management specialists, endangered species biologists, compliance specialists (NEPA, SHPO), and land and fire management planners.
- Individuals who need to communicate fire management and ecological principles and practices across diverse landscapes; such as public affairs, information officers, education and other specialists.
- Agency administrators, senior managers, and Tribal leaders.
- Fireline leadership, such as prescribed fire and fuels specialists, assistant FMO's, and strategic operational planners.

Participants will include Federal, State, Tribal, local government, non-governmental organization representatives and all their partners.

**National Advanced Fire And Resource Institute  
April 26 – 30, 2010  
Tucson, Arizona**

**FIRE IN ECOSYSTEM MANAGEMENT**

Opening Comments – Fire Leadership & Ecosystem Management .....	Corbin Newman
Human/Social Dimensions of Fire Risk Management .....	Terry Daniel
Landscape Ecology .....	Wendel Hann
Legal Considerations .....	Mike Johns
Fire & Climate .....	Tom Swetnam
Fire Cycle Determination .....	Bill Patterson
Fire Regimes: Applying Ecological .....	Bob Mutch/Kathy Davis
Soil & Water .....	Deborah Martin
Soil Case Study .....	Deborah Martin
Fire in Aquatic Ecosystems .....	Robert Gresswell
Smoke.....	Dennis Haddow
Ecosystem Dynamics .....	Andi Thode
Invasive Panel .....	Mike Pellant
Fire in Grasslands, Shrublands, & Riparian Zones: Homogenization & Fragmentation .....	Dave Engle
Prairie Restoration for Biological Diversity & Wildlife .....	Terry Bidwell
Cultural Resources .....	Gary Knudsen
Mescalero Case Study .....	Jacque Buchanan/Bill Hornsby/Thora Padilla
Wilderness .....	Gary Oye
Historical Role of Fire .....	Steve Pyne
Fire Marketing.....	Don Smurthwaite
An Update on the Federal Fire Policy Implementation Plan.....	Dick Bahr
Integrating Ecological and Human Dimensions in Banff National Park and Alberta’s East Slopes.....	Cliff White
Closeout .....	Dennis Dupuis

# NATIONAL ADVANCED FIRE & RESOURCE INSTITUTE

## M-580 FIRE IN ECOSYSTEM MANAGEMENT

**Monday  
April 26, 2010**

**Day One Leader – Dennis Dupuis**

<b>0800 – 0810</b>	<b>- NAFRI Welcome Orientation</b>	<b>NAFRI</b>
<b>0810 – 0830</b>	<b>- Course Introduction</b>	<b>Dennis Dupuis</b>
<b>0830 – 0915</b>	<b>- Participant Introductions</b>	<b>Roberta D’Amico</b>
<b>0915 – 0930</b>	<b>- BREAK</b>	
<b>0930 – 1030</b>	<b>- Opening Comments – Fire Leadership &amp; Ecosystem Management</b>	<b>Corbin Newman</b>
<b>1030 – 1040</b>	<b>- BREAK</b>	
<b>1040 – 1200</b>	<b>- Human/Social Dimensions of Fire Risk Management</b>	<b>Terry Daniel</b>
<b>1200 – 1300</b>	<b>- BROWN BAG LUNCH – (Presenters pending)</b>	
<b>1300 – 1430</b>	<b>- Landscape Ecology</b>	<b>Wendel Hann</b>
<b>1430 – 1440</b>	<b>- BREAK</b>	
<b>1440 – 1600</b>	<b>- Legal Considerations</b>	<b>Mike Johns</b>
<b>1600 – 1610</b>	<b>- BREAK</b>	
<b>1610 – 1700</b>	<b>- Fire &amp; Climate</b>	<b>Tom Swetnam</b>
<b>1700 – 1710</b>	<b>- Wrap Up</b>	

# NATIONAL ADVANCED FIRE & RESOURCE INSTITUTE

## M-580 FIRE IN ECOSYSTEM MANAGEMENT

**Tuesday  
April 27, 2010**

**Day Two Leader – Sue Wilder**

**0750 – 0800 - Day Intro**

**0800 – 0945 - Fire Cycle Determination**

**Bill Patterson**

**0945 – 1000 - BREAK**

**1000 – 1130 - Fire Regimes: Applying Ecological**

**Bob Mutch/Kathy Davis**

**1130 – 1230 - BROWN BAG LUNCH (Presenters pending)**

**1230 – 1320 - Soil & Water**

**Deborah Martin**

**1320 – 1330 - BREAK**

**1330 – 1420 - Soil Case Study**

**Deborah Martin**

**1420 – 1430 - BREAK**

**1430 – 1520 - Fire in Aquatic Ecosystems**

**Robert Gresswell**

**1520 – 1530 - BREAK**

**1530 – 1700 - Smoke**

**Dennis Haddow**

**- Field Trip Logistics**

# NATIONAL ADVANCED FIRE & RESOURCE INSTITUTE

## M-580 FIRE IN ECOSYSTEM MANAGEMENT

**Wednesday  
April 28, 2010**

**Day Three Leader – Roberta D’Amico**

**0750 – 0800 - Day Intro**

**0800 – 0915 - Ecosystem Dynamics**

**Andi Thode**

**0915 – 0930 - BREAK**

**0930 – 1100 - Invasive Panel  
Cheat Grass – Mike Pellant  
Everglades – Rick Anderson, NPS  
Buffel Grass – Travis Bean, U of Arizona  
Salt Cedar – Mark Kaib, FWS**

**Mike Pellant**

**1100 – 1110 - BREAK**

**1110 – 1200 - Objectives Field Trip**

**Roberta D’Amico/Emily Irwin**

**1200 – 1700 - Field Trip**

**Roberta D’Amico/Emily Irwin**

# NATIONAL ADVANCED FIRE & RESOURCE INSTITUTE

## M-580 FIRE IN ECOSYSTEM MANAGEMENT

Thursday  
April 29, 2010

Day Four Leader – Jamie Connell

0750 – 0800 - Day Intro

- Fire in Grasslands, Shrublands, and Riparian Zones: Dave Engle  
Homogenization and Fragmentation

0800 – 0950

- Prairie Restoration for Biological Diversity and Wildlife Terry Bidwell

0950 – 1000 - BREAK

1000 – 1130 - Cultural Resources

Gary Knudsen

1130 – 1230 - BROWN BAG LUNCH (Presenter's pending)

1230 – 1400 - Mescalero/Lincoln NF Stewardship Case Study  
Jacque Buchanan/Bill Hornsby/Thora Padilla

1400 – 1410 - BREAK

1410 – 1500 - Wilderness

Gary Oye

1500 – 1510 - BREAK

1510 – 1710 - Historical Role of Fire

Steve Pyne

1710 – 1715 - Wrap Up

# NATIONAL ADVANCED FIRE & RESOURCE INSTITUTE

## M-580 FIRE IN ECOSYSTEM MANAGEMENT

**Friday  
April 30, 2010**

**Day Five Leaders – Emily Irwin**

**0750 – 0800 - Day Intro**

**0800 – 0900 - Fire Marketing**

**Don Smurthwaite**

**0900 – 0910 - BREAK**

**0910 – 1030 - An Update on the Federal Fire  
Policy Implementation Plan**

**Dick Bahr**

**1030 – 1100 - Break and Group Evaluations**

**1100 – 1250 - Integrating Ecological and Human Dimensions in  
Banff National Park and Alberta's East Slope**

**Cliff White**

**1250 – 1300 - Wrap Up and Closeout**

**Dennis Dupuis**

**M-580 FIRE IN ECOSYSTEM MANAGEMENT**  
**April 26 - 30, 2010**  
**Tucson, Arizona**

**STEERING COMMITTEE ROSTER**

**Jamie Connell**  
DOI Bureau of Land Management

**Roberta D'Amico**  
DOI National Park Service

**Emily Irwin**  
US Forest Service

**Anne Zimmermann**  
US Forest Service

**Gladys Ross**  
US Forest Service

**Dennis Dupuis, Chair**  
DOI Bureau of Indian Affairs

**Sue Wilder, Co-Chair**  
DOI US Fish & Wildlife Service

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**FACULTY ROSTER**

**Rick Anderson**  
DOI National Park Service

**Terry Bidwell**  
Oklahoma State University

**Jacque Buchanan**  
US Forest Service

**Terry Daniel**  
University of Arizona

**Dave Engle**  
Oklahoma State University

**Dennis Haddow**  
DOI US Fish and Wildlife Service, Retired

**Bill Hornsby**  
DOI Bureau of Indian Affairs

**Gary Knudsen**  
US Forest Service

**Bob Mutch**  
US Forest Service, Retired

**Dick Bahr**  
DOI National Park Service

**Matthew L Brooks**  
US Geological Survey

**Kendall Clark**  
US Forest Service

**Kathy Davis**  
DOI National Park Service

**Robert E Gresswell**  
US Geological Survey

**Wendel Hann**  
US Forest Service, Retired

**Mike Johns**  
United States Attorney's Office

**Deborah Martin**  
US Geological Survey

**Corbin Newman**  
US Forest Service

**Garry Oye**  
DOI National Park Service

**Bill Patterson**  
University of Massachusetts

**Steve Pyne**  
Arizona State University

**Tom Swetnam**  
University of Arizona

**Cliff White**  
Parks Canada

**Thora Padilla**  
Mescalero Apache Tribe

**Mike Pellant**  
DOI Bureau of Land Management

**Don Smurthwaite**  
DOI Bureau of Land Management

**Andi Thode**  
Northern Arizona University

**M-580 FIRE IN ECOSYSTEM MANAGEMENT**

**April 26 – 30, 2010**

**Tucson, Arizona**

**Participant Roster**

**Tyson Albrecht**  
US Forest Service

**William Armstrong**  
US Forest Service

**Carolyn Ballard**  
US Forest Service

**Dannell D. Begay**  
DOI Bureau of Indian Affairs

**Brett Blumhardt**  
DOI Bureau of Land Management

**Darren Borgen**  
US Forest Service

**Cheryl Bright**  
DOI Bureau of Land Management

**ROBYN BROYLES**  
DOI Bureau of Land Management

**Gregg Christensen**  
US Forest Service

**Thomas Conner**  
US Forest Service

**Chris Deets**  
US Forest Service

**Davie Dukart**  
DOI National Park Service

**Erin Ely**  
US Forest Service

**Shannon Evans**  
US Forest Service

**Vanessa Fields**  
DOI US Fish & Wildlife Service

**Ryan Foote**  
US Forest Service

**Diana Allen**  
US Forest Service

**Rick Atwell**  
US Forest Service

**William F. Basye**  
DOI National Park Service

**Rusty Bigelow**  
US Forest Service

**Casey B. Boespflug**  
US Fish & Wildlife Service

**Scott Bressler**  
DOI National Park Service

**John Bristow**  
US Forest Service

**Randall Chappell**  
US Forest Service

**Stephanie Coleman**  
US Forest Service

**Benjamin Curtis**  
US Forest Service

**Daniel G. Drees**  
DOI National Park Service

**Daniel Eddy**  
US Forest Service

**Scott English**  
DOI Bureau of Land Management

**Jay Fassett**  
US Forest Service

**Jerran Flinders**  
DOI Bureau of Land Management

**Michael Frederick**  
US Forest Service

**Jerry I. Gonzales**  
US Forest Service

**Rich Gustafson**  
DOI Bureau of Indian Affairs

**Chet Hatch**  
US Forest Service

**Michael Johnston**  
US Forest Service

**Kc Kasey**  
State of Nevada

**Jeffrey D. Koch**  
US Forest Service

**Patrick G. Lair**  
US Forest Service

**Bret Lewis**  
US Forest Service

**Nicole Longfellow**  
US Forest Service

**Chase J. Marshall**  
DOI US Fish & Wildlife Service

**Scott Meneely**  
DOI Bureau of Land Management

**Paul Minow**  
US Forest Service

**Valdis L. Neha**  
DOI Bureau of Indian Affairs

**Nathaniel D. Nozie**  
US Forest Service

**Anna Payne**  
US Forest Service

**Kurt Pindel**  
DOI Bureau of Land Management

**Mark Rash**  
DOI US Fish & Wildlife Service

**Lucus Santio**  
US Forest Service

**Colleen Graue**  
DOI US Fish & Wildlife Service

**Michael Hackett**  
DOI Bureau of Land Management

**Thomas Heintz**  
US Forest Service

**Spencer Johnston**  
US Forest Service

**Byron Kimball**  
US Forest Service

**Lynn D. Kolund**  
US Forest Service

**Mike Lewelling**  
DOI National Park Service

**Chuck Lewis**  
US Forest Service

**Thad A Marcoe**  
US Forest Service

**Aaron Martin**  
US Forest Service

**Dale Middleton**  
US Forest Service

**Karen Miranda Gleason**  
DOI US Fish & Wildlife Service

**Jeremy Nelson**  
US Forest Service

**Darren Olsen**  
US Forest Service

**Dale Pfau**  
DOI US Fish & Wildlife Service

**David Powell**  
US Forest Service

**Russell Riebe**  
US Forest Service

**Melissa Sartor**  
US Forest Service

**William Schroeder**  
US Forest Service

**Tom Schultz**  
US Forest Service

**Robert Sommer**  
US Forest Service

**Mathew C. Thompson**  
US Forest Service

**Slater Turner**  
US Forest Service

**Mike Uebel**  
US Forest Service

**Kevin Weaver**  
US Forest Service

**Ross Wise**  
DOI US Fish & Wildlife Service

**John Zarlengo**  
US Forest Service

**Darwin M. Schultz**  
DOI US Fish & Wildlife Service

**Jason Snellman**  
US Forest Service

**Richard C. Struhar**  
DOI US Fish & Wildlife Service

**Glen Tingley**  
US Forest Service

**Randall Turrill**  
DOI Bureau of Land Management

**Jon Wallace**  
DOI US Fish & Wildlife Service

**Darryl K. Wilson**  
DOI Bureau of Indian Affairs

**Lisa Young**  
US Forest Service