



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

3265 East Universal Way, Tucson, Arizona 85756
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File Code: 5100

Date: January 11, 2010

Subject: Rx510 Advanced Fire Effects
February 22 -26, 2010

To: Rx510 Course Participant

Congratulations on your selection to attend the Rx510 Advanced Fire Effects course to be held at the National Advanced Fire & Resource Institute (NAFRI). Enclosed is your Participant Information Packet. The course dates are February 22 – 26, 2010. Please note the course starts Monday morning at 0800. This gives you information concerning the course, the faculty, a list of fellow participants, and details on logistics of the course. Social hours including dinner on Tuesday evening please bring \$5.00 to \$10.00 cash to cover cost of food and tip to class on Monday. Night session in which attendance is encouraged, on Wednesday evening from 1900-2030.

Dress Code:

Dress for the course is casual business attire, no hats allowed in the classroom.

Pre-Course Work:

On December 18, 2009 you were sent the Rx510 pre-course work CD which consists of two sections. The pre-course work is also available on the NAFRI web site (www.nafri.gov).

Pre-Course Reading

All students selected are to complete the required reading prior to the beginning of the Rx510 course. Estimated time to complete the 60 pages of reading is 4 to 6 hours and needs to be completed by February 21, 2010.

Peer Learning Group

Read the Peer Learning Group Description (Handout 2) and complete the assignment as outlined under the section titled "How are we using Peer Learning Groups in Rx510?" Estimated time to complete is 8 to 12 hours.

Course Information:

Rx510 begins Monday, February 22 at 0800 in the Sonoran Auditorium. Check the last three pages of this packet for detailed maps of the facilities. The course ends at 1100 on Friday, February 26.

Rx510 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 a 2½" notebook along with various handouts.

Cancellation Policy:

If for any reason you are unable to attend the course, please let us know.

Logistics:

Course Facility

Our facility is next to the Tucson International Airport. You can find a map of the area at www.nafri.gov or the last pages of this packet.

Place: National Advanced Fire & Resource Institute (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, February 22 at 0800. Travel should be scheduled for Sunday, February 21, 2010. The course ends Friday, February 26 at 1100. 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 the area of NAFRI and the airport provide a wide variety of amenities suitable for all visitors. The hotels and NAFRI are within one mile of the Tucson airport. If you mention NAFRI, 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.

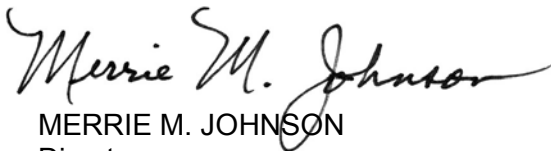
Transportation

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.

Restaurants

There are plenty of lunch options within walking distance of NAFRI. All of the hotels offer some version of continental breakfast if you mention you are with NAFRI.

We are looking forward to presenting Rx510 here at NAFRI. Please contact Gladys Ross, Rx510 Course Coordinator, at 520-799-8753 or by email gmross@fs.fed.us with any questions or concerns about the Rx510 Course.



MERRIE M. JOHNSON
Director

Rx510 ADVANCED FIRE EFFECTS
February 22 – 26, 2010
Tucson, Arizona

COURSE GOAL

To demonstrate the application of science-based fire effects knowledge in the planning, implementation, and evaluation in the use of wildland fire.

COURSE OBJECTIVES

Upon completion of this course, the participant will be able to:

Translate broad ecological information into goals and objectives for the use of wildland fire.

Incorporate short-term and long-term fire effects information into planning and implementation for the use of wildland fire.

Provide examples and discuss methods for monitoring and evaluating fire effects.

Apply the adaptive management process to refine a program for the use of wildland fire.

UNIT OBJECTIVES

UNIT I – INTRODUCTION

1. Understand the context for the course.
2. Introduce faculty, steering committee and participants.
3. Understand the national perspective on fire effects and fuels treatments.
4. Recognize how changing environmental science and management practices may impact vegetation management.

UNIT II – ECOLOGICAL AND CULTURAL CONTEXT

1. Know the value of integrating information about past and present vegetation and landscape characteristics into the treatment planning process.
2. Describe how landscape patterns, dynamics and disturbances relate to fires and their effects.
3. Recognize how historical, cultural, and social perceptions and practices provide a context for fire use.

UNIT III – MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT

1. Describe monitoring and evaluation and their relationship to adaptive management.
2. Identify steps for developing a monitoring program on your home unit.
3. Use case studies to demonstrate the use of monitoring and evaluation to assess and improve the effectiveness of fire management programs.

UNIT IV – TREATMENT DESIGN AND APPLICATION

1. Discuss how the use of wildland fire and other treatments are being designed and used to meet management objectives.

UNIT V – IMPLEMENTING IGNITION STRATEGIES

1. Use Case Studies to:
 - a. Discuss appropriate considerations when designing and implementing complex ignition strategies.
 - b. Share lessons learned from on going complex landscape scale ignition projects.
 - c. Demonstrate the value of on going monitoring, interdisciplinary cooperation, and community involvement in successful project implementation.

UNIT VI – PEER LEARNING GROUPS

1. With active participation, students will use their Peer Learning Group to:
 - a. Reinforce the main concepts of Rx510.
 - b. Learn by giving and receiving peer input on real-life projects.

UNIT VII – PRE-COURSE WORK

1. Become familiar with concepts presented at the Advanced Fire Effects course.
2. Become familiar with the Peer Learning concept and will have completed the Pre-Course Assignment.

Rx510 ADVANCED FIRE EFFECTS
February 22 – 26, 2010
Tucson, Arizona

FACULTY ASSIGNMENTS

I. INTRODUCTION

PAULA SEAMON, Unit Leader

- A. Introduction and Expectation for Rx510 Fenn Wimberly
- B. National Perspective Gary Jarvis
- C. Ecological Assessments, Adaptive Management,
and Collaboration Merrill Kaufmann
- D. Should Climate Change Affect our Fire and Vegetation
Management Practices? Alan Taylor

II. ECOLOGICAL AND CULTURAL CONTEXT

LOUISA EVERS, Unit Leader

- A. Fire as a Landscape Process Don Falk
- B. Invasive Plants Jane Kapler Smith/
Kris Zouhar
- C. Process Influencing Pattern: Examples from Fire
and Avian Ecology Vicki Saab
- D. Fire-induced Landscape Dynamics Morris Johnson
- E. Traditional Knowledge – Forgotten Fires Frank Lake
- F. Reading the Landscape Alan Taylor
Historical Context and Reference Conditions
- G. Public Acceptance of Prescribed Fire:
What Matters and Why? Sarah McCaffrey

III. MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT

TIM MENARD, Unit Leader

- A. Developing a Monitoring Program – “A Minimalist Approach” Mary Taber
- B. Fire Monitoring Program: Marais des Cygnes NWR Tim Menard
- C. Everglades National Park Rick Anderson
- D. Alaska Fire Management & Monitoring: Vast Areas, Large Fires, and Limited Staff Jennifer Barnes
- E. Using Remote Sensing to Understand Landscape Fire Effects Jay Miller

IV. TREATMENT DESIGN AND APPLICATION

RIVA DUNCAN, Unit Leader

- A. Treatment Planning and Scheduling Kevin Hiers
- B. Developing a Treatment Strategy for Restoring Forests and Protecting Communities in the Colorado Front Range Merrill Kaufmann
- C. Implementing Fire Regimes in Wildland Remnants: Problems and Pitfalls Joel Carlson
- D. Fire Fuels and Vegetation Management for Multiple Resource Objective in the Northern Great Basin Jeff Rose
- E. Rehabilitation of Aspen Forests: Treatment Options Involving Fire Wayne Shepperd
- F. The Maturing of a Wildland Fire Use Program Stu Hoyt

V. IMPLEMENTING IGNITION STRATEGIES

HAL LUEDTKE, Unit Leader

- A. Applying Fire in the Banff National Park Ian Pengelly
- B. A Story about Fire and the Menominee Forest - Ecological Forestry and Landscape Scale Pine Barrens Restoration Jeremy Bennett
- C. Sevier Plateau Ecosystem Restoration Project Using Fire to Re-establish Ecosystem Function Kim Soper/
Mike Crawley
- D. Ocala Sand Pine, Stand Replacement Burning Dwight Snow
- E. Wildland Fire Use – Okanogan Wenatchee N. F. Bobbie Scopa

VI. PEER LEARNING GROUP

MATT DICKINSON, Unit Leader

VII. PRE-COURSE WORK

**MATT DICKINSON, Unit Leader
HELEN SMITH, Co-Unit Leader**

- A. Pre-course Reading
- B. Peer Learning Group Project

COURSE QUIZZES AND FINAL EXAM

HELEN SMITH, Unit Leader

Rx-510 ADVANCED FIRE EFFECTS

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Sunday
February 21, 2010

TRAVEL TIME TO NAFRI

1700 – 1800	- Faculty Meeting	Faculty
1800	- Peer Learning Group Leaders' Meeting	Group Leaders

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Monday
February 22, 2010

	UNIT I – INTRODUCTION	Unit Leader: Paula Seamon
0800 – 0815	- NAFRI Detail	Merrie Johnson/Gladys Ross
0815 – 0920	- I-A Introduction and Expectation for Rx510	Fenn Wimberly
0930 – 1020	- I-B National Perspective	Gary Jarvis
1030 – 1130	- I-C Ecological Assessments, Adaptive Management, and Collaboration	Merrill Kaufmann
1130 – 1230	- LUNCH	
1230 – 1320	- I-D Should Climate Change Affect our Fire and Vegetation Management Practices?	Alan Taylor
1330 – 1335	UNIT II – ECOLOGICAL AND CULTURAL CONTEXT	Unit Leader: Louisa Evers
1335 – 1425	- II-A Fire as a Landscape Process	Don Falk
1435 – 1525	- II-B Invasive Plants	Jane Kapler Smith/Kris Zouhar
1535 – 1625	- II-C Process Influencing Pattern: Examples from Fire and Avian Ecology	Vicki Saab
1635 – 1730	- VI Peer Learning Group	Matt Dickinson
1745	- Faculty Meeting	Faculty

Rx-510 ADVANCED FIRE EFFECTS

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Tuesday
February 23, 2010

0745 – 0800	-	Daily Objectives	Fenn Wimberly
0800 – 0830	-	Quiz #1	Helen Smith
0830 – 0920	-	II-D Fire-induced Landscape Dynamics	Morris Johnson
0930 – 1020	-	II-E Traditional Knowledge – Forgotten Fires	Frank Lake
1030 – 1130	-	II-F Reading the Landscape Historical Context and Reference Conditions	Alan Taylor
1130 – 1230	-	LUNCH	
1230 – 1320	-	II-G Public Acceptance of Prescribed Fire: What Matters and Why?	Sarah McCaffrey
1330 – 1420	-	VI Peer Learning Group	Matt Dickinson
1430 – 1435	-	UNIT III – MONITORING, EVALUATION, AND ADAPTIVE MANAGEMENT Unit Leader: Tim Menard	
1435 – 1530	-	III-A Developing a Monitoring Program – “A Minimalist Approach”	Mary Taber
1530 – 1620	-	III-B Fire Monitoring Program: Marais des Cygnes NWR	Tim Menard
1630 – 1700	-	Questions and Answers	Steering Committee
1715	-	Faculty Meeting	Faculty
1800	-	Social Hour	

Rx-510 ADVANCED FIRE EFFECTS

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Wednesday
February 24, 2010

0745 – 0800	-	Daily Objectives	Fenn Wimberly
0800 – 0830	-	Quiz #2	Helen Smith
0830 – 0920	-	III-C Everglades National Park	Rick Anderson
0930 – 1020	-	III-D Alaska Fire Management & Monitoring: Vast Areas, Large Fires, and Limited Staff	Jennifer Barnes
1030 – 1130	-	III-E Using Remote Sensing to Understand Landscape Fire Effects	Jay Miller
1130 – 1230	-	LUNCH – Brown Bag with Faculty	Faculty
1230 – 1320	-	VI Peer Learning Group	Matt Dickinson
1330 – 1335	-	UNIT IV – TREATMENT DESIGN AND APPLICATION Unit Leader: Riva Duncan	
1335 – 1425	-	IV-A Treatment Planning and Scheduling	Kevin Hiers
1435 – 1525	-	IV-B Developing a Treatment Strategy for Restoring Forests and Protecting Communities in the Colorado Front Range	Merrill Kaufmann
1535 – 1630	-	IV-C Implementing Fire Regimes in Wildland Remnants: Problems and Pitfalls	Joel Carlson
1630 – 1700	-	Questions and Answers	Steering Committee
1715	-	Faculty Meeting	Faculty

Rx-510 ADVANCED FIRE EFFECTS

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Thursday
February 25, 2010

0745 – 0800	-	Daily Objectives	Fenn Wimberly
0800 – 0830	-	Quiz #3	Helen Smith
0830 – 0920	-	IV-D Fire Fuels and Vegetation Management for Multiple Resource Objectives in the Northern Great Basin	Jeff Rose
0930 – 1020	-	IV-E Rehabilitation of Aspen Forests: Treatment Options Involving Fire	Wayne Shepperd
1030 – 1120	-	IV-F The Maturing of a Wildland Fire Use Program	Stu Hoyt
1130 – 1230	-	LUNCH	
1230 – 1320	-	VI Peer Learning Group	Matt Dickinson
1330 – 1335	-	UNIT V – IMPLEMENTING IGNITION STRATEGIES	Unit Leader: Hal Luedtke
1335 – 1425	-	V-A Applying Fire in the Banff National Park	Ian Pengelly
1435 – 1525	-	V-B A Story about Fire and the Menominee Forest - Ecological Forestry and Landscape Scale Pine Barrens Restoration	Jeremy Bennet
1535 – 1625	-	V-C Sevier Plateau Ecosystem Restoration Project: Using Fire to Re-establish Ecosystem Function	Kim Soper/ Mike Crawley
1635 – 1735	-	Final Exam	Helen Smith
1635 – 1735	-	Steering Committee Meeting	Steering Committee
1745	-	Faculty Meeting	Faculty
1815	-	Grade Final Exam	Faculty
1915	-	Faculty Meeting	Faculty

Rx-510 ADVANCED FIRE EFFECTS

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Friday
February 26, 2010

0800 – 0850	-	V-D	Ocala Sand Pine, Stand Replacement Burning	Dwight Snow
0900 – 0950	-	V-E	Wildland Fire Use – Okanogan Wenatchee N.F.	Bobbie Scopa
1000 – 1020	-		Final Exam Review	Helen Smith
1030 – 1100	-		Closeout	Fenn Wimberly

For Location and Logistic information please follow this link
<http://www.nafri.gov/pages/locationandlogistics.htm>