ECOSYSTEM MANAGEMENT TECHNICIAN CLASSES
MAY 8, 1995 - NOVEMBER 17, 1995

Date: May 8

Location: Classroom/Field - Barker Creek Area

Instructors: Yvonne Everett, Roger Jaegel, Durand Mortenson

Guests: Dave Loefler, USFS-LEO
        Dan Lane, E.M.T.

Topics:
- Orientation
- Safety and First Aide
- Radio Use - Shasta Trinity N.F.
- Field review of evenaged management, thinning, shaded fuel break.
- Introduction to plant communities/plant identification

Handouts: Course outline
          Shasta Trinity N.F. radio use handbook.
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: May 18
Location: Field - Indian Valley
Instructors: Ken Baldwin, Yvonne Everett, Durand Mortenson
Topics:
- Principles of Ecology
- Plant growth requirements
- Soils/Geology
- Ecosystem formation
- Plant Identification
Handouts:
Plant anatomy drawings
Species list (Common names)
ECOSYSTEM MANAGEMENT TECHNICIAN CLASSES

Date: May 19
Location: Indian Valley
Instructors: Yvonne Everett, Roger Jaegel, Durand Mortenson
Topics:
- Plant Communities
- Vegetation Inventory Plots (exercise)
- Plant Identifications
- History of management activity
- Even age/uneven aged management
- Review prescription for wildlife area - Butter E.M. Plan

Handouts:
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: May 26

Location: Buck Ridge Fuels Project - South Fork Mountain

Instructors: Yvonne Everett, Roger Jaegel

Topics:
- History of management activities
- Fuels reduction project review
- Identification of ecosystems
- Ecosystems/Landscapes/Plant Communities
- Plant collection and identification (Exercise)
- Succession
- Climate/Microclimate
- Water relationships in forest ecosystems

Handouts:
ECOSYSTEM MANAGEMENT TECHNICIAN CLASSES

Date: June 2
Location: Field - Buck Ridge Area - South Fork Mountain
Instructors: Ken Baldwin, Roger Jaegel
Topics:
- Intro. to forest land management plan
- Intro. to Presidents forest plan
- Description of management area and late successional reserve
- History of management activity
- Review fuel break thinning
- Review overstory removal cutting
- Review regeneration unit with green tree retention
Handouts: South Fork Mountain management area (STLMP)
          Major silviculture systems and their application (STLMP)
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: June 20
Location: Hayfork Summit Plantation 1964 burn area
Instructors: Roger Jaegel, Durand Mortenson
Topics: -Fire history
        -Salvage and Restoration
        -Planting prescription

**Description of thinning types**
- Crown thinning
- Selection thinning
- Geometric thinning
- Thinning to new ecosystem management objectives (desired condition)

**Exercises**
- Locate area on forest LMP map
- Determine Presidents Plan allocation
- Determine forest plan prescription
- Determine management area

**List special influence area**
- Highway 3

**Review**
- Types of harvest prescription
- Vegetation types/plant communities

Handouts:
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date:       June 23
Location:   Ditch Gulch, Dubekella Mountain area of Hayfork AMA
Instructors: Ken Baldwin, Yvonne Everett, Roger Jaegel, Durand Mortenson
Topics:      Intro. to:
             - Wildlife inventory
             - Methods
             Wildlife habitation relationship
             - Field plot data collection
             - Discussion of plot data
             - History of management in the area
             - Definition of management (Hayfork AMA)
Handouts:   CWHR training manual
            selected papers
            List of species of special concern
            Sampling methods for wildlife
            BATS
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: July 14

Location: Big Creek late successional reserve

Instructors: Ken Baldwin, Yvonne Everett, Roger Jaegel

Guests: Tim Viel - Fisheries Bio, George Zink - Hydrologist, Frances Duchi Shasta College, Susan Rhodes, TOT

Topics: Area Description (LSR)
        History of Management
        Aquatic Inventories
        Stream survey techniques (exercise)
        Riparian ecosystems inventory (exercise)
        Review of riparian vegetation
        Map location NW1/4NW1/4 Sec (exercise)

Handouts: General stream survey
          Riparian site assessment sheet
          Fish indentification drawing
          "Bugs - What are They Good for"
          Bioassessment sampling procedure
          Habitat assessment quide
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: July 21
Location: Friendly Fire (1987) Rail Gulch
Instructors: Ken Baldwin, Yvonne Everett, Roger Jaegel
Topics:
- Area description
  - Management History/Fire History
  - Fuels management
  - Fuel loading - photo series (exercises)
  - Fire danger rating system
  - Fuel moisture, temperature, humidity, wind speed
  - Contract fire plan for service contracts and timber sales
  - Contracts and timber sales
  - Emphasis on fire compliance and liability
  - Plant identification review
  - Geopositioning introduction (GPS)
Handouts: Fire and our Ecosystems
  Guidelines for fire requirement for HFRD timber sales
  Fire plan for service contracts
  Forest management burning handbook
  "The Crisis in Our Forests" Sunset Magazine July 1995
  Handouts on GPS
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: July 28

Location: Ditch Gulch area (Hayfork AMA)

Instructors: Ken Baldwin, Yvonne Everett, Roger Jaegel

Guests: Sherry Chilott - USFS Archaeologist
Faye Teach - USFS Archaeologist Technician

Topics:
- Antiquities Act
- Archeological Recon. Report
- Site identification and recording
- Soils inventory
- Soil profiles/types
- Soil classification
- Competency testing for intro. to ecosystem management
- Competency review for forest practices.

Handouts: Archeological site record
Summary of federal cultural legislation
Recognizing prehistoric artifacts
Glass bottles - basic ID
Tin cans - basic ID
A soil profile
Soil inventory - Shasta/Trinity NF
Runoff and soil erosion
Physical properties of soils and plant environments
Cal. Board of Forestry - procedure for estimating soil erosion hazard rating (1990)
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: August 4th

Location: Pilot Creek Watershed, Mad River RD

Instructors: Ken Baldwin, Roger Jaegel

Guests: USFS Martha Ketelle, Marcia Andre'

Topics:
- Pilot Creek ecosystem management plan - field review (public meeting)
- Watershed analysis/Watershed
- Thinning prescription for Fisher and Goshawk
- Habitat improvement
- Fuels management
- Review of tree measurement (exercise)

Handouts:

Note: The class participated in a public field trip for the Pilot Creek Ecosystem Management Project. Martha Ketelle, Marica Andre' and the staff of the Mad River Ranger Station, presented a field tour of Pilot Creek and explained the Ecosystem Management Plan in the AMA.
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: August 11

Location: Sweeny Gulch Hayfork Creek (Hayfork AMA)

Instructors: Ken Baldwin, Roger Jaegel

Guests: Jennifer Chambers, USFS Hydro Tech.
Julia Riber USFS AMA Coordinator
Susan Rhodes TOT

Topics: Ecological Unit Inventory

- Vegetation mapping (exercise)
- Riparian area mapping (exercise)
- Hydrology and fisheries data

Intro. to Hayfork AMA

- Adaptive Management implementation plan

Handouts: Vegetation mapping notes
Hydrology and fisheries data
Riparian EUI data
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: Sept. 1
Location: Tulop III Fuel Break
Instructors: Ken Baldwin, Roger Jaegel
Topics:
- Chipper operation and safety (exercise)
- Fuel breaks objectives/markings
- Review of stand inventory and tree measurement
- Review required competencies
- Tulop III fuel reduction operation plan including:
  - Scope and duration
  - Project description
  - Location
  - Equipment requirement and limitation
  - Work standard for cutting, brushing, hand piling and covering

Handouts:
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: Sept. 8

Location: Field Tulop III Fuel Break

Instructors: Ken Baldwin, Roger Jaegel

Topics: -Time/work study plots on fuel break

-Use of redy mapper
  for traversing plots (exercise)

-Determination of area (acres) from redy mapper

-Calculation of cost/acre for fuel break plots

-Comparison of redy mapper traverse and GPS traverse in terms of time/cost

Handouts: Hourly rates and roll up cost for crew time

Time work study and costs per acre for plots #1 and #4 - Tulop Fuel Break

Directions for Reinhardt Redy Mapper, Lilligren model

Slope correction tables
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date:       Sept 15
Location:   Big Creek Timber stand plot
Instructors: Roger Jaegel, Durand Mortenson
Topics:
- Tree measurement (exercise)
- Plot traverse for timber stand/redy mapper (exercise)
- Survival exam technique (exercise)
- History of management activity in the area
- Competency testing for forest practices
Handouts:
  USFS timber cruise book
  Cruising guidelines for salvage sales
  Variable radius plot
  Timber cruising handbook
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: Sept. 22

Location: Field - Donaldson Creek (Big Creek Drainage)

Instructors: Ken Baldwin, Roger Jaegel, Durand Mortenson

Guest: Ginger Lynch, Susan Rhode, TOT

Topics:
- Review safely and fire precautions
- Cordwood, cubic measure and board ft. volumes
- Project schedule and review
- Forest Roads Overviews
- Maint. and drainage design
- Restoration of forest roads

Handouts: Cord wood volumes
Cubic foot volumes
Determining volumes of trees and logs
Conservation Leader
Newsletter - Ecosystem Health
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: October 6
Location: Buckeye Ridge, Trinity Lake
Instructors: Ken Baldwin, Roger Jaegel, Durand Mortenson, Dan Naef
Guests: Laird Crandell, Ginger Lynch, TOT
Topics: -Operation and safety - Bitterdroot Yarder (exercise)
        -Cordwood measurement (exercise)
        -Scale small logs (exercise)
        -Management history/fire history of the area
Handouts:
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: October 13
Location: Classroom - fairgrounds
Instructors: Ken Baldwin, Roger Jaegel
Topics:
- Review of federal contracts
- Review multi task labor intensive forestry contracts
- Review in detail to solicitation, offer, award sections
- Review service contract plantation survival exams

Request for Quotations

- Cost estimating exercise on precommercial thinning project
- Labor, equipment, travel, costs
- Costs/unit
- Final bidding

Handouts:
- How to bid federal contract
- RFQ-plantation survival
- Multi task service contract R.F.P.
ECOSYSTEM MANAGEMENT TECHNICIAN CLASS

Date: October 20

Location: WRTC - Fairground classroom

Instructors: Ken Baldwin, Roger Jaegel

Topics: - Geographic positioning system orientation
        - Forest practices competency testing
        - Forest inventories

Handouts:
Entrepreneurship training offered through the Cascade Small Business Development Center.
<table>
<thead>
<tr>
<th>Project</th>
<th>Jobs in The Woods Projects</th>
<th>Contract</th>
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<tbody>
<tr>
<td>FROM SO</td>
<td>SIGNED WRTC</td>
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- Butler Creek Line Main: #2
- Trip II
- N. Fork/Snowy Creek Fuel Break
- Old Growth Veg
- Manual Fire
- Veazier Creek Seed Collection
- Smoky Creek Seed Collection
- Smoky Creek Upland Fuel Break
- Smoky Creek Cutler
- Smoky Creek Skid Trail
- East Fork Fencing

Sheet 2

- Trip II
- N. Fork/Snowy Creek Fuel Break
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USFS IN-KIND TRAINING COST CONTRIBUTION

EXAMPLE

$234,000 DIVIDED BY 20 TRAINEES = $11,700.00

$11,700 DIVIDED BY 1040 HOURS = $11.25/HR

LESS $5.145% = $ 6.115

$6.12 = HOURLY IN-KIND FOR TRAINING

20 TRAINEES x 1040 HOURS = 20,800

x .6.12

$127,296.00