

A. SUMMARY OF 2009 FIELD AND OFFICE WORK

The 2009 field season started in April, when Laura and Beth made a site visit to ELMA to install photopoints and collect biomass data in their East Encerrito project area. Sarah Uihlein (Seasonal) started on May 26th. Peter Raymond (SCA) joined the crew on June 9th.

In early July, Laura received confirmation that the NPS/USFS contract for the Bandelier Fire Ecology Program to conduct fire effects monitoring on USFS lands was approved. Laura immediately began hiring additional crew members. Jenny Schon (former Crew Leader) was hired to lead the NPS crew for three weeks (while Beth would lead the USFS crew). Gabrielle Bohlman, Tatiana Smail, and Alexander Buecking were hired as SCA's for the USFS crew. Lucy Padilla and Dana Betts were hired for approximately thirty days to help both the NPS and USFS crews. All crew members helped to accomplish both NPS and USFS work.

The field season for all parks ended in October. The crew installed and read a total of 64 plots and re-read a total of 167 plots in all parks combined. They also installed and read a total of 20 plots in the Monument Canyon Research Natural Area (MCRNA) on USFS lands. All data entry and checking was completed by mid November, much earlier than in previous seasons. The 2009 field season was a huge success!

BANDELIER NATIONAL MONUMENT AND US FOREST SERVICE

Sarah Uihlein started work on May 26th. She spent her first week in Bandelier's Seasonal Training and took a CPR class on June 4th. Peter Raymond started on June 9th. Both Sarah and Peter took the pack test on June 10th. Beth, Sarah, and Peter were all red-carded in June.

The crew spent some time in the office in early June, completing orientation and starting field preparations for the summer. At the end of June, they collected data on 7 mechanical treatment plots along highway 4.



In early July, the crew visited 10 mechanical treatment plots along FS Road 289. During the last week of July, the crew began installing plots in Bandelier's Project Area 7 in preparation for a collaborative prescribed burn with the Valles Caldera National Preserve. Karim, from Bandelier's Ecology Group, helped the crew for this week.

Jenny, Gabrielle, Alex, Dana, and Tatiana all started work on August 3rd. Two crews were created: an NPS crew consisting of Jenny (leader), Peter, Dana, and Gabrielle; and a USFS crew consisting of Beth (leader), Sarah, Alexander, and Tatiana. Both crews worked simultaneously to accomplish all the necessary field work. The NPS crew installed 14 plots in Project Area 7, which included 4 plots on Valles Caldera lands. The USFS crew began installing plots in the MCRNA. Beth's last day was August 13th and Jenny finished on August 20th. Sarah Uihlein then became the Acting Crew Leader for the remainder of the season.

In September, the crew finished installing plots in the MCRNA. Five plots were read in Bandelier's Project Area 38, fuel loading data was collected in Project Area 14, and tree mortality data was collected in Project Area's 40, 48, 49, and 55.

In October, the crew accomplished a lot of office work including learning FFI, entering and checking data, and identifying unknown plants. They also spent a couple of days helping Bandelier's Natural Resources Division. Gabrielle, Alexander, and Tatiana's last day was October 22nd.

Sarah Uihlein worked through November 25th to finish up office work and complete the final data checking and validation.

This season, the crew installed and read a total of 14 plots in Bandelier. They re-read a total of 49 plots.

EL MALPAIS NATIONAL MONUMENT

The field season at El Malpais began in April when Laura and Beth installed photopoints and collected biomass data in the East Encerrito Project Area.

The crew returned to ELMA on June 17th to re-read 5 plots in the North Rendija Project Area.

In August, the crew re-read the PRE data on 4 plots in Homestead and 2 plots in North Pasture Ridge (the data was older than two years). They also installed a total of 12 plots in Homestead (6), North Pasture Mill (2), and North Pasture Ridge (4).

In November, the crew returned to collect immediate
Later in August, the crew began re-reading 10 plots in the Cerritos Gap and Agua Fria Project Areas. This work was finished in early September.

Sarah Uihlein returned to ELMA in October to help with a prescribed burn in Agua Fria Meadow.

By the end of November, all data entry, checking, and validation was complete for ELMA.

This was a productive field season at El Malpais, with the crew re-reading a total of 21 plots and installing a total of 12 plots.

PECOS NATIONAL HISTORICAL PARK

The field season at Pecos began in July, when the crew visited Project Area's 7, 8, 21, 22, and 27 to install 28 plots.

The next week, the crew re-read 10 plots in Project Area 6 and re-collected shrub data on 38 plots in project areas 3, 4, 13, 14, and 17. The shrub data was collected according to a new protocol, implemented after data analysis revealed the old protocol wasn't sufficient in providing accurate information about shrub populations.



Sarah Uihlein returned to ELMA in November to help with a prescribed burn in Project Area's 3, 9, 10, 12, 13, 14, 15, 17, and 20.

By the end of November, all data entry, checking, and validation was complete for PECO.

This was a productive field season at PECO, with the crew re-reading a total of 86 plots and installing a total of 28 plots.

SALINAS PUEBLO MISSIONS NATIONAL MONUMENT

The crew visited SAPU during the week of June 22nd. They re-read 11 plots in Abo 4 (6) and Abo 5 (5) and installed 10 non-permanent plots in Gran Quivera 4.

By the end of November, all data entry, checking, and validation was complete for SAPU.

This was a productive field season at SAPU, with the crew re-reading a total of 11 plots and installing a total of 10 plots.



FIRE EFFECTS PLOT WORKLOAD 2009

“Pre, Immediate Post, and Post (1-20 yrs)” refer to both prescribed burning and mechanical treatment. The “Total Plots” column indicates the total number of plots installed in the Project Area to date.

TABLE 1. BAND

Park	Project Area	Type of Plot (forest, photo point, other)	Pre	Im. Post	Post (1-20 yrs)	Total Plots
BAND	PA 1	Forest Plot				20
	PA 5	Mechanical Thinning				4
	PA 7	Forest Plot	14			14
	PA 8	Forest Plot				4
	PA 8	Mechanical Thinning				3
	PA 9	Forest Plot				32
	PA 14	Forest Plot			15	15
	PA 27	Forest Plot				2
	PA 29	Forest Plot				7
	PA 30	Forest Plot				7
	PA 38	Forest Plot			5	5
	PA 40	Forest Plot				15
	PA 40	Mortality (Trees Only)			3	
	PA 41	Photopoint				
	PA 48	Forest Plot				5
	PA 48	Mortality (Trees Only)			5	
	PA 49	Forest Plot				3
	PA 49	Mortality (Trees Only)			3	
	PA 55	Forest Plot				1
	PA 55	Mortality (Trees Only)			1	
	PA 59	Forest Plot				4
	HWY 4	Mechanical Thinning			7	19
	FS 289	Mechanical Thinning			10	14
Total			14		49	174 total plots in park

A total of 63 plots were read in BAND in 2009.

TABLE 2. USFS

Park	Project Area	Type of Plot (forest, photo point, other)	Pre	Im. Post	Post (1-20 yrs)	Total Plots
USFS	MCRNA	Forest	20			20
Total						20 total plots

A total of 43 plots were read in ELMA in 2008.

TABLE 3. ELMA

Park	Project Area	Type of Plot (forest, photo point, other)	Pre	Im. Post	Post (1-20 yrs)	Total Plots
ELMA	Agua Fria	Forest Plot			5	5
	Bat Cave East	Forest Plot				5
	Big Horn	Forest Plot				2
	Big Tubes	Forest Plot				5
	Cerritos Gap	Forest Plot			5	5
	Cerro Bandera	Forest Plot				10
	Coral Road	Forest Plot				2
	Double Sinks	Forest Plot				2
	East Rendija	Forest Plot				5
	El Calderon	Forest Plot			miss	3
	Homestead	Veg\tree\fuel plot	6		4	10
	Lava Falls	Veg\tree\fuel plot				4
	Lava Fields	Forest Plot				6
	Lava's Edge	Veg\tree\fuel plot				5
	Lost Woman	Forest Plot				2
	Malpais Mill	Veg\tree\fuel plot				4
	North Little Hole	Forest Plot				6
	North Pasture Mill	Veg\tree\fuel plot	2			2
	North Pasture Ridge	Forest Plot Veg\tree\fuel plot	4		2	6
	North Rendija	Forest Plot			5	5
	Volcano Slopes	Forest Plot				4
Total			12		21	98 total plots in park

A total of 33 plots were read in ELMA in 2009.

TABLE 4. PECO

Park	Project Area	Type of Plot	Pre	Im.	Post	Total
------	--------------	--------------	-----	-----	------	-------

		(forest, photo point, other)		Post	(1-20 yrs)	Plots
PECO	3	Veg\tree plot		12	12	12
	4	Veg\tree plot		4	4	4
	6	Veg\tree plot			10	10
	7	Veg\tree plot	5			5
	8	Veg\tree plot	5			5
	13	Veg\tree plot		7	7	7
	14	Veg\tree plot		7	7	7
	17	Veg\tree plot		8	8	8
	18	Veg\tree plot				16
	19	Veg\tree plot				4
	21	Veg\tree plot	6			6
	22	Veg\tree plot	4			4
	27	Veg\tree plot	8			8
	18 & 19	Photopoint				
Total			28	38	48	96

A total of 114 plots were read in PECO in 2009.

TABLE 5. SAPU

Note: The plots installed at SAPU are not permanent transects.

Park	Project Area	Type of Plot (FMH, photo point, other)	Pre	Im. Post	Post (1-20 yrs)	Total Plots
SAPU	Abo 2	Veg\tree plot				5
	Abo 3	Veg\tree plot				5
	Abo 4	Veg\tree plot			6	6
	Abo 5	Veg\tree plot			5	5
	Quarai 5	Veg\tree plot				5
	Gran Quivera-4		10			
Total			10		11	26

A total of 21 plots were read in SAPU in 2009.

FIRE ECOLOGY STAFFING 2009

TABLE 5.

Personnel	Starting Date	Ending Date	# of Pay Periods	READ Qualified	Training and Development or Comments
Laura Trader (Ecologist)	1-1-09	12-31-09	26	No	FFI on-line trainings. Laura is still recovering from chronic illness, but has been able to maintain 30-40 hours per week during this calendar year.
Jenny Byington (Lead)	8-3-09	8-20-09	1.5	No	Jenny returned to help lead the BAND crew
Beth Gastineau (Lead)	4-13-09	8-13-09	9	No	Fire refresher
Sarah Uihlein (GS-5 Seasonal and acting lead)	5-26-09	11-25-09	12	No	Fire Refresher 2 Prescribed Fires 2 days with Helitak
Peter Raymond (SCA and Emergency Hire)	6-9-09 8-31-09	8-27-09 9-24-09	SCA 2	No	Fire Refresher
Gabrielle Bohlman (SCA)	8-3-09	10-22-09	SCA	No	
Tatiana Smail (SCA)	8-3-09	10-22-09	SCA	No	
Alexander Buecking (SCA)	8-3-09	10-22-09	SCA	No	
Dana Betts (Emergency Hire)	8-4-09	8-27-09	2	No	
Lucy Padilla (Emergency Hire)	8-10-09	8-20-09	1	No	
Bonnie Bolser (Emergency Hire)	10-12-09	11-5-09	2	No	

SCA= Student Conservation Associate (volunteer)

MANAGEMENT OBJECTIVES AND MONITORING RESULTS 2009

Data analysis is currently being conducted. Powerpoint presentations for all parks will be available in February\March, 2010.

B. FIRE ECOLOGIST ACCOMPLISHMENTS AND AREA OF FOCUS

TABLE 6. Ecologist Accomplishments

Laura is still recovering from chronic illness, but has been able to work 30-40 hours per week for the 2009 season. All necessary planning, scheduling, data analysis, report writing, and meetings have been accomplished for all parks and the USFS.

Category	Percent Time	Accomplishments/Focus Areas
Planning/Projects	30%	- Assisted in writing fire and resource objectives for BAND, ELMA, and PECO prescribed fire plans. - Coordinated with Bill Armstrong of the USFS to prepare a task order and scope of work for a NPS\USFS contract to conduct monitoring on USFS lands. - Completed all planning related to implementation of a USFS monitoring program. - Continued working on Bandelier's fire history database. Includes investigating and reconciling old spreadsheets, entering data from 1202's from 1999-2007, and creating a readme sheet for future use. - Continued planning and preparation for monitoring in project areas scheduled to burn in 2010 in all parks. - Worked with field crew leader to review and update SOP's for field and office work at all parks. - Worked with field crew leader to assess and fix numerous data and program errors. - Updated and revised the fire history and Fire Ecology Program powerpoint presentation for crew members. - Updated Access plot information lists for BAND and ELMA, PECO, and SAPU - Completed two "NPS Success Stories," one for BAND and one for PECO. - Worked on the Fire Newsletter that is distributed to Los Alamos bi-annually. - Did all budgeting and budget planning.
GIS	16%	- Supported GIS work for BAND's Fire Management Program, including treatment plan maps, project area maps, scope of work maps, etc. - Supported GIS work for other divisions in BAND, as related to Fire Management treatments, such as prescribed fires, in the park (i.e. visitor center maps, archeological maps, etc.) - Completed all the GIS work for new plot installations at BAND, ELMA, PECO, SAPU, and USFS.
Presentations/posters Interviews	5%	- Presented Fire Ecology data at fire and/or resource management meetings. - Presented the Fire Ecology Program to a local school group. - Presented USFS data from 2009 season.
NPS Meetings/ Task Groups	5%	- Annual Fire and Resources Management Meetings at Bandelier. - Attended a LANDFIRE meeting in Santa Fe.

		• Meetings with local fire community: Valles Caldera National Preserve and USFS. • Met and coordinated with Bill Armstrong of the USFS in regard to setting up a monitoring program on USFS lands.
Interagency Work	2%	• Attended East Jemez Resources Council meeting. • Met with local Forest Service personnel to discuss the implementation of vegetation and fuel monitoring on local Forest Service lands.
Fire Assignments	0%	None
Fieldwork	1%	• Assisted with fieldwork at BAND.
Research	0%	None
Data Entry	0%	None
Data Conversion	10%	• Worked on a myriad of FFI data transition issues. • Spent a considerable amount of time with FFI transition issues, setting up databases, checking for errors, and creating data entry guidelines specific to each park. • Reviewed and created new field and office datasheets to accommodate the transition to FFI.
Data Analysis and Reports	21%	• Analyzed data from each park and USFS. • Created an annual report for USFS and a presentation. • Completed Annual Reports for BAND, ELMA, PECO, and SAPU.
Supervision/Admin	10%	• Directly supervised GS-7 field crew leader and up to nine crew members. • Did all the hiring for the 2009 season, including USFS.
Training	<1%	• S 130-190 refresher. • FFI on-line trainings.

C. FIRE EFFECTS CREW ACCOMPLISHMENTS AND AREA OF FOCUS

TABLE 7. Fire Effects Crew Accomplishments

Category	Percent Time	Accomplishments\Focus Area
FMH plots and all other plot work (except WUI)	50%	Completed all necessary planning and field work at BAND, ELMA, PECO, SAPU, and USFS (251 plots).
WUI plots	0%	None
CBI plots	0%	None
Fire Assignments	1%	2 prescribed fires (1 crew members).
Data Entry	20%	Entered and checked all 2009 field data and some data leftover from the previous seasons.
FFI Related Issues	15%	Problems encountered with software, data conversion, data access, data entry. Had to create new datasheets and change some plot binder organization due to data conversion.
Leadership/Admin	13%	Leadership duties, travel, payroll, updating schedules, etc.
Training	1%	S 130, S 190, fire refreshers.
Public Outreach	0%	None

D. ANNUAL REPORT SUPPLEMENT

("2009 BAND, ELMA, PECO, and SAPU Annual Report Supplement.xls" - Please see the attached CD for this Excel spreadsheet file).

E. ANNUAL REPORT SUPPLEMENT ADDITIONAL INFORMATION

1. Identify types of fire effects monitoring databases or spreadsheets being used (e.g., FFI, Access, Excel).

All of our datasets for all of our parks have been transferred to FFI. We are currently struggling with some data transfer issues and have spent a considerable amount of time this season trying to review our data, detect problems, and create reasonable solutions. This is a time consuming process and may take a year or more to complete.

We have an Access database for each of our parks that contains information such as plot names, project areas, acreages, treatment dates, aspect, elevation, field schedule by year, plot read dates, UTM coordinates, etc.

2. Annual Meetings –

Laura has attended several meetings at Bandelier where fire and/or resource managers have discussed Fire Ecology Program data results. Laura will prepare, analyze, and present data to ELMA, PECO, and the USFS in March, 2010.

Laura has, on many occasions in 2009, analyzed data for use in developing objectives for burn plans and/or to fill requests for data at BAND, ELMA, and PECO.

F. PLOT LISTS AND INFORMATION

Please see attached for a list of plots by project area for each park.