

Joshua Tree National Park



# Superintendent's Annual Report

FY2011



**JOSHUA TREE**  
NATIONAL PARK

## **SUPERINTENDENT'S OFFICE**

The park's newest Superintendent arrived on duty the week of February 14<sup>th</sup>, 2011. Mark Butler transferred to the park after a 34 year career at Yosemite National Park.

Fiscal Year 2011 was primarily focused on the park's 75<sup>th</sup> Anniversary. A GS-9 employee was hired to assist with all the events throughout the year. Mr. George Land did an exceptional job of coming to the park without any prior National Park Service experience and hit the ground running. Chief of Interpretation, Joe Zarki, and Karin Messaros guided Mr. Land through the complex policies and necessary procedures to ensure that all partnership and fundraising activities were in accordance with regulations. The new products were developed and created with the assistance of the Joshua Tree National Park Association.

Alternative Energy proposals and developing relationships continued to consume much time from within the Superintendent's office. The Eagle Mountain Landfill continued to go through changes, and the project may still occur. First Solar and correspondence with the Eagle Mountain Hydro –Electric Pumped Storage Project proponents took up much time and energy, particularly from the Resource staff, with much oversight from the Superintendent. Preparing responses to alternative energy proposals is taking an enormous amount of staff time.

### **Geographic Information Services Office**

The park's GIS Specialist, Sean Murphy continued to work with a number of partners to help analyze land use issues, and assisted the creation of modeling scenarios for many of the park's resource issues. During FY2011, the Superintendent established the Project Services Group of which Sean quickly became the lead. His ability to analyze what was needed to establish criteria and a rating process to set FLREA project proposal priorities was utilized with the assistance of Vic Scott and Bob Clyde. Sean also continued his excellent partnerships with the University of Redlands, other network GIS staff and working with the Morongo Basin Open Space Group.

### **Human Resources**

During calendar year 2011, the Human Resource operation was supervised by the Assistant Superintendent. During this time, the network recruited for a lead HR Specialist to be located in Boulder City at Lake Mead.

The Human Resources Office at Joshua Tree National Park is a part of the Mojave and Mediterranean Human Resource Office (M&M SHRO) which encompasses a complex Human Resource operation. The work accomplished by this team is staggering in quantity and complexity as workload continues to increase rather than decrease as anticipated with the transition to the Human Resources Operation Center (HROC).

Human Resource staff on-site continues to provide park employees and managers with classification of positions, position management, employee relations, staffing and placement, initiation of personnel actions, pay administration, ethics, etc. The HR Specialist at Joshua Tree directly supervises three full time employees and one part time employee.

The Human Resources Specialist at Joshua Tree served as the Acting Human Resources Officer for the network for nearly four months.

The HR staff completed in excess of 492 personnel actions, coordinated 36 vacancy announcements for Joshua Tree, purged and scanned hundreds of Employee Performance Appraisal Files (EPAP's) for the SHRO, and handled numerous employee relation cases.

In addition to the work completed for the SHRO, and Joshua Tree employees, the HR Specialist provides program management and supervision for 1.5 FTE employees. As part of the WASO program, the personnel security and suitability adjudication program for all NPS positions that handle government money and worked with WASO staff to develop, write and review bulletins and policies related to human resources and suitability issues. Throughout FY 11, the office handled more than 2500 background investigations for the NPS.

### **Lands**

Participation in lands meetings with the regional office continued, with excellent and active working relationships with the Mojave Desert Land Trust, the Conservation Land Acquisition Work Group which is a subcommittee of the Desert Managers Group, and the Morongo Basin Open Space Group. The Mojave Desert Land Trust continues to work with Douthit Consulting in the process of acquiring parcels as they become available.

### **Legislation**

Legislation that affected the park includes two bills included Senator Feinstein's California Desert Protection Act of 2011, and an NPS sponsored California Desert Lands Bill. Time was spent on coordinating language, maps, definitions and recommendations for both bills. As of the close of FY11, neither bill has moved forward.

### **Partnerships**

Joshua Tree National Park continues to work in a number of formal and informal partnerships for the major goals of networking, regional problem solving, and effective land use planning and resource and knowledge sharing.

ACCESS Fund	Morongo Basin Conservation Association
Basinwide Foundation	Morongo Basin Open Space Group
Coachella Valley Mountains Conservancy	Morongo Basin Regional Economic Development Consortium
Copper Mountain College	Morongo Basin Transit Authority
DesertARC	National Parks Conservation Association
Desert Managers Group	National Park Foundation
Desert Regional Tourism Association	Riverside Art Museum
Friends of Joshua Tree	Service First Agreement with other Federal Agencies, BLM & USFS
Galapagos Islands National Park	University of Redlands – GIS Program
Joshua Tree National Park Association	
Joshua Tree Search and Rescue	
Mojave Desert Land Trust	

Participation in community meetings with the Town, City and County-wide Councils, Chamber of Commerce groups, local and regional water districts and regional and local tourism organizations was much more frequent, due to the cooperative spirit to engage the communities in the celebration of the park's 75<sup>th</sup> Anniversary.

## **Planning**

The park's GMP planning process slowed down to some extent due to budget cuts and modifications to the planning processes as determined at the WASO level. The primary short term planning efforts that came out of the Superintendent's office were in response to the 75<sup>th</sup> Anniversary events.

## **Renewable Energy Projects**

### **First Solar Desert Sunlight Project**

The NPS continued to work with the BLM and the project proponent on the development and permitting for this project. In FY2011, this included reviewing, compiling comments for, and replying to the Final Environmental Impact Statement and the Record of Decision to permit the project. The NPS requested and was granted Cooperating Agency Status on this project. A new practice was developed and implemented through the establishment of a Cooperative Agreement, which allows for First Solar to reimburse the NPS at a minimal rate for expenses incurred as a result of the monitoring of the potential impacts for this project. Cooperatively, the NPS will continue to carry the majority of the costs associated with reviewing documents and communications.

### **enXco Desert Harvest Project**

NPS initiated project planning for this endeavor through initial meetings with the BLM and the project proponent. The Notice of Intent was filed for this project at the end of the fiscal year. The NPS has submitted a request for Cooperating Agency Status on this project.

### **Bureau of Land Management Solar Programmatic Environmental Impact Statement**

The BLM continued in the development of the 6-state Solar PEIS. As coordinated through the WASO office, JOTR staff worked on site specific comments for the Riverside East Solar Energy Zone and the Iron Mountain Solar Energy Zone, which are respectively adjacent to and in proximity to the park. Comments were provided on the Draft EIS and internal revisions prior to the release of the Targeted Supplemental Draft Solar PEIS which is anticipated at the end of October 2011. This included region-wide and nation-wide coordination to develop resource impact assessments that could occur as a result of extensive development within these zones.

### **California Desert Renewable Energy Conservation Plan**

The NPS (both local and regional) continued to participate in the development of this California-wide desert plan for all renewable energy projects. In FY2011, this and the BLM's PEIS began to integrate more to present a united plan, although the BLM plan will continue to focus only on solar projects. This is most noticeably reflected in the decision to release a joint Environmental Impact Report/Environmental Impact Statement. Comments were provided on preliminary strategic planning documents. A draft Preliminary Conservation Strategy is anticipated at the end of October 2011.

### **Mojave Network Renewable Energy Team**

The Mojave Network has developed a Renewable Energy Team to develop effective replies and coordinated approaches for potential projects adjacent to national park units. Eagle Crest Energy Pumped Storage Project – The NPS continues to provide comments and feedback on this project, which has become re-invigorated with the solar projects in proximity. This project is being promoted in tandem with the solar projects for its “battery” capacity at high energy use times when the solar fields might not otherwise be providing

power. In October 2010, the NPS provided comments on the Draft Environmental Impact Report. In February, the NPS joined the others in the Department of the Interior in the filing of a Motion to Intervene with the Federal Energy Regulatory Commission.

### **Eagle Mountain Landfill**

The Eagle Mountain Landfill continues to be presented as a viable option for the Eagle Mountain lands on the eastern side of the park. NPS staff continued to work with Regional and WASO staff on other viable alternatives to this proposal.

### **Safety**

Safety continues to be the priority in Joshua Tree National Park and within the Pacific West Region. The culture within the park staff has been growing and developing with new technologies, such as purchasing and carrying SPOT beacons and upgrading the entire radio system park wide to ensure more reliable communications. A new training library has been created. More employees are feeling empowered to speak up for themselves and for each other. Two employees were committed to attend Train the Trainer for Operational Leadership classes. The park is close to a 100% rate of participation for the Operational Leadership class. Tailgate safety sessions are held on a more regular basis by more work groups than in the past.

Throughout 2011, the park's DART rate decreased.  
(Days Away from Work due to **R**estriction or job **T**ransfer)

<b>Fiscal Year</b>	<b>2011</b>	<b>2010</b>	<b>2009</b>
Joshua Tree	1 Report	11 Reports	2 Reports
Mojave	16 Reports	25 Reports	20 Reports
Pacific West Region	133 Reports	156 Reports	192 Reports

In 2010, Joshua Tree had 10 cases with 229,252 hours lost for a DART rate of 8.724  
In 2011, Joshua Tree had 3 cases with 205,139 hours lost for a DART rate of 1.925

Luke Sabala continued his tenure as the park's Safety Officer. Katy Matthews continues to Chair the Safety Committee. Other members include:

- Katy Matthews (Chair)
- Dave Henley (Training Coordinator)
- Vic Scott (Budget; ended term in Aug)
- Annie Bertheaud (Publicist; ended term in Feb)
- Pam Tripp (Notetaker; ended term in Aug)
- Lynda Murphy (Ended term in Aug)
- Stacy Manson (Publicist)
- Chris Cusumano
- Pat Pilcher (Notetaker; replaced Pam)
- Cruz Jimenz (Budget; replaced Vic)

### **Training Opportunities Provided by the Safety Committee**

- Lockout/Tagout Training (11/17/10)
- Bloodborn Pathogens Training (12/14/10)
- Hazard Communications Training (12/14/10)
- OSHA Training (December 2010)
- Ergonomics Seminar and Workstation Assessments (1/11/11)

- Fire Extinguisher Training (January 2011)
- Stress Training (3/30/11)
- Operational Leadership Training (5/11 & 12/11; Luke Sabala and Josh Hoines)
- 1<sup>st</sup> Aid/CPR Instructor Training (6/20 & 21/11; Red Cross)
- 4WD Training (Summer 2011)
- Worker's Compensation Training (08/25/11)

#### **Events Coordinated**

- Great California Shakeout Earthquake Drill (10/20/10 at 10:20 AM; missing employee and volunteers scenario)
- Wellness Day (5/19/11 from 11-3 at Knott's Sky Park; Hearing Test Van, Blood Pressure Booth, Presidential Challenge, Safety Trivia)
- All Employee Meeting (Safety talk from Mark Butler)
- Distributed Safety Certificates at the annual Volunteer in Parks dinner

#### **Inspections**

- Performed safety inspections of JOTR facilities (December 2010 as part of OSHA training)
- Performed safety inspections of JOTR facilities (February 2011)
  - Discrepancies were written up in an Excel spreadsheet for Division Chiefs to access
  - Discrepancies posted on SharePoint site for Division Chiefs
    - Division Chiefs assigned their employees to perform corrective actions for all discrepancies found by the Safety Committee
- Performed safety inspections of JOTR facilities (July 2011)
  - Discrepancies written up in an Excel spreadsheet for Division Chiefs to access and take appropriate actions.

#### **Miscellaneous**

- Stacy Manson created and continues to maintain the JOTR Safety Page on the SharePoint Site
- Safety Newsletters produced on a bi-monthly basis (Jan/Feb, Mar/Apr, May/Jun, Jul/Aug, and Sept/Oct)
- Revamped Safety Rewards Program (Quarterly Safety Recognition awards given based on nomination by peers)
- Fire Extinguishers were serviced and inspected
- Created 3 Measureable Goals for the Safety Committee
  - Started to create a Mission Statement for the Safety Committee
  - Created Safety Binders for each division to keep track of tailgate safety sessions and JHAs used
  - Created a Monthly Safety Checklist to be performed by each Division to try and eliminate repeat safety inspection discrepancies

## **The 75<sup>th</sup> Anniversary of the establishment of Joshua Tree National Monument**

In 1936, President Franklin D. Roosevelt signed documents establishing Joshua Tree National Monument, a federally protected area of over 700,000 acres of desert lands in southern California. In 1994, Congress passed the California Desert Protection Act and the Monument earned National Park status.

Chief of Interpretation, Joe Zarki had prepared and submitted the PMIS request for funding. This was approved via the Fee Collection program, specifically the FLREA program funding process.

Superintendent Curt Sauer designated Karin Messaros to be the primary lead to plan, coordinate and implement ideas, and to track and maintain the budget. Joe Zarki was designated to serve as an operations assistant, due to his knowledge of partnerships, outreach and media relations.

Throughout the summer of 2010, a position description was prepared, approved, and classified at the GS-9 level. Ms. Mimi Gorman served as the first coordinator, and acted in the position while the job was being announced. She served in this role from August 2010 until November 2010, when Mr. George Land was hired.

During the initial planning phase throughout 2010, a community committee was formed to collaborate on many events, and to bring a higher level of exposure of the park in community events that had already been established in years past. A website was designed and Mr. Jim Harvey of the Homestead Valley area was the web designer

The following is a list and brief description of those individual events:

### **1. January 22, 2011, THE LIVING DESERT, PALM DESERT**

Rangers George Land and Allie Jimenez set up the newly purchased EZ-Up at the entrance to the Living Desert. Ranger Jimenez, in the “Mojave Max” costume, and Ranger Land had the opportunity to interface with all arriving and departing Living Desert visitors. Park maps, brochures, and Max stickers were handed out to the visitors. A good number of visitors had questions about hiking, camping and the status of the wildflower blooms in the park. The event provided a high visibility opportunity to partner with the Living Desert and benefit on an outreach basis with a highly visited lower desert attraction.

### **2. January 27, 2011, JOEY ENGLISH RADIO SHOW TAPING, PALM SPRINGS**

Rangers Karin Messaros and George Land were invited to participate in the taping of local radio personality, Joey English. English is well known in Coachella Valley and her program has a substantial following. This opportunity allowed the park to advertise the upcoming 75<sup>th</sup> year as well as answer questions about the park in general to a lower desert audience. The program was aired on Saturday, January 29, 2011.

### **3. January 29, 2011, 75<sup>TH</sup> ANNIVERSARY KICK-OFF EVENT, BELL CENTER, COPPER MOUNTAIN COLLEGE, JOSHUA TREE,**

The anniversary kick-off event marked the official start of the 75<sup>th</sup> year of events. Noted TV personality, Mr. Huell Howser was master of ceremonies as well as the keynote speaker. Dr Roger Wagner, President of Copper Mountain College welcomed an audience of close to three hundred attendees. California State Assemblyman Paul Cook, and

representatives from Senator Dianne Feinstein’s office as well as Representative Mary Bono Mack’s office were in attendance. The U.S. Marine Color Guard from MCAGCC presented the colors and Miss Allison Welch, the youngest most active volunteer in JOTR, led the pledge of allegiance.



NPS, Regional Director Christine Lehnertz delivered remarks, and Deputy Regional Director Martha Lee was also in attendance.



This was the first public event for newly hired Superintendent, Mark Butler, who is seated here next to Mr. Huell Howser.



The Minerva Hoyt California Desert Conservation Award was presented by Mark Wheeler of the JTNPA to recipient Owens Valley Committee represented by Mr. Mark Bagley.



Immediately following the ceremony was a reception complete with refreshments and birthday cake. Flautist Gregg Hammond provided music for the program and reception.



**4. February 18-27, 2011, RIVERSIDE COUNTY FAIR AND DATE FESTIVAL**

The park annually participates with the Riverside County Fair and Date Festival however this year, the emphasis was on the 75<sup>th</sup> Anniversary. Park personnel and volunteers staffed the booth and brochures, newspapers, and various giveaways ranging from carabineer key chains to Mojave Max stickers were made available to the public. The park had a very favorable response from attendees.

**5. March 5, 2011, WILDFLOWER FESTIVAL, SAN JACINTO/SANTA ROSA NATIONAL MONUMENT, PALM DESERT**

In cooperation with the BLM and the United States Forest Service, park staff participated in the 2011 Wildflower Festival located at the visitor center for San Jacinto/Santa Rosa National Monument Visitor Center in Palm Desert. Rangers Dave Carney and George Land represented the park and were able to meet with participants as they arrived at the Visitor Center on shuttle buses. The attendees were comprised of people interested in nature and the outdoor activities. The rangers had the opportunity to interact with the public, and field questions concerning the upcoming wildflower season in the park as well as questions about hiking, camping, touring routes and 75<sup>th</sup> Anniversary events. Over 280 direct contacts were made.

**6. March 7-20, 2011, BNP PARIBAS TENNIS TOURNAMENT**

The park was invited to occupy and share booth space with the Palm Springs Desert Resorts Convention and Visitors Authority, (CVA). The attendance at the Paribas is over 300,000 people over the two week tournament. Booth space costs were \$15,000, however, as a member of the CVA, the park was able to share the space free of charge. It was a great opportunity to engage a different demographic into conversations about the park, and the National Park Service. There was a great deal of interest in the park, particularly about the upcoming wildflower season. Collateral resources included park brochures, newspapers, wildflower update reports, pins, stickers and carabineers. Ranger George Land attended 8 days of the tournament and had almost 1200 direct contacts and approximately 300 casual contacts.

**7. April 1<sup>st</sup> – June 7<sup>th</sup>, 2011 “CELEBRATING JTNP” ART SHOW & RECEPTION, TWENTYNINE PALMS CHAMBER CENTER, TWENTYNINE PALMS,**

21 artists from Twentynine Palms were invited to exhibit their work. The event was managed by the Twentynine Palms Arts Council.

**8. April 5, 2011, PALM SPRINGS LIBRARY LECTURE SERIES**

Ranger George Land spoke to a crowd of 36 attendees about the history of the monument, park, Minerva Hoyt and the 75<sup>th</sup> Anniversary. The lecture included a slide show, Q&A, and pins and park brochures for each attendee.

**9. April 12, 2011, KIWANIS CLUB BREAKFAST, TWENTYNINE PALMS MASONIC LODGE**

Ranger George Land spoke to the Kiwanis Club about the 75<sup>th</sup> Anniversary and upcoming programs and events. Each attendee was given updated park newspapers and brochures.

**10. April 16 – May 7, 2011 – weekly, TWENTYNINE PALMS SPRING CONCERT SERIES, LUCKIE PARK**

Karin Messaros attended and spoke to crowds ranging from 75 to 130 during the free concert series. Ranger Messaros spoke on various topics about the park and was well received by the concert attendees. The local community was pleased to hear of the upcoming activities and all appreciated the gifts of guitar picks, park newsletters, and the children received the 75<sup>th</sup> Anniversary stickers at each concert.

**11. April 16<sup>th</sup>-23<sup>rd</sup>, 2011, NATIONAL PARK WEEK, NATIONAL JR. RANGER DAY, JOSHUA TREE NATIONAL PARK,**

Jr. Ranger Day was coordinated and implemented by Ranger Mimi Gorman and featured a number of events in the park. A park fire truck complete with Smokey Bear, an LE vehicle and new park bulldozer were on display at Twin Tanks. Kids were taught flag etiquette, had a tour of the park greenhouse, and were treated to a “touch table” (snake skins, sheep horn, tortoise shell, etc.) as well as a variety of other events. Over 200 direct contacts were made during Junior Ranger Day, and over 12,000 Special Edition Jr. Ranger booklets were distributed throughout 2011.



Additional Jr. Ranger Day Events

12. May 2<sup>nd</sup>, 2011, DESERT HOT SPRINGS CHAMBER OF COMMERCE, DESERT HOT SPRINGS,  
Ranger Dave Carney spoke to a group of 35 at the DHS Chamber of Commerce breakfast. Carney spoke primarily on the 75<sup>th</sup> Anniversary and upcoming anniversary events.
13. April 29<sup>th</sup> and 30<sup>th</sup>, 2011 BIO-DIVERSITY HUNT, OASIS OF MARA,

Joshua Tree
National Park Service  
U.S. Department of the Interior  
Joshua Tree National Park

## BioDiversity Hunt

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**Friday & Saturday**  
**April 29 and 30**  
**10 am to 4 pm**

**Oasis Visitor Center**  
**29 Palms, California**

*Discover more about the plants, mammals, birds, reptiles, insects, and spiders that call the Oasis of Mara at Joshua Tree National Park, home.*



Roadrunner



Blister Beetle



Side-blotched Lizard

Join us for ranger-guided walks, nature talks, insect, mammal, reptile, and plant identification stations. Bring the whole family, play biodiversity games, win prizes, and it's free!

Find additional information and a schedule of activities on the Joshua Tree website: [www.nps.gov/jotr/planyourvisit/bioblitz.htm](http://www.nps.gov/jotr/planyourvisit/bioblitz.htm).



*Questions?*  
Contact Vicky Chang, Joshua Tree National Park's science coordinator  
by e-mail at [Victoria\\_Chang@nps.gov](mailto:Victoria_Chang@nps.gov) or by phone at 760-367-5579.



75 Years of Inspiration

Beginning at 10:00am on Fri, 4/29, more than 30 taxa specialists from a variety of research institutions and agencies, amateur naturalists from the local community, and park staff rallied together for 30 hours to attempt to inventory all the species that live in the 58 acres of the Oasis of Mara. As part scientific discovery, part educational outreach, and part celebration of biodiversity, it was a very successful public event.

13. **May 5<sup>th</sup>, 2011**, Without fanfare, the donated billboard space with the billboard design created by RW Creative was printed and installed.



14. **May 14<sup>th</sup> and 15<sup>th</sup>, 2011, JOSHUA TREE MUSIC FESTIVAL, JOSHUA TREE LAKE AND RV CAMPGROUND**

This annual event is a two-day event which features a number of live music acts and a variety of vendors, artists and craftsmen. JTNP was invited to participate by the producer of the event, Mr. Barnett English. Rangers Karin Messaros, Joe Zarki, and George Land worked shifts at the event and staffed the park EZ-Up. Brochures, newspapers, commemorative guitar picks and anniversary posters were distributed to contacts. The custom-made, Fender Commemorative 75<sup>th</sup> Anniversary Guitar was on exhibit. Saturday, 75 direct contacts and Sunday, 48 direct contacts were made. Attendees were mainly of a younger demographic and many were interested in recreational opportunities in the park.



**15. May 15, 2011, MISSION SPRINGS WATER DISTRICT ANNIVERSARY, MISSION SPRINGS DISTRICT OFFICE, DESERT HOT SPRINGS,**

Ranger George Land staffed a table at the event which was attended by the Mayor of Desert Hot Springs as well as the majority of the board of DHS Chamber of Commerce and other community leaders. Park brochures, newspapers and 75<sup>th</sup> Anniversary posters were distributed at the event. There were approximately 32 direct contacts made. Pedestrian traffic was sparse traffic due to adverse weather conditions.

**16. May 28, 2011, GRUBSTAKES DAY PARADE AND COMMUNITY FAIR, YUCCA VALLEY**

Superintendent Mark Butler was Grand Marshal of this year's parade and led the procession accompanied by Assistant Superintendent Karin Messaros in bright, red, fuel efficient convertible donated by Yucca Valley Chrysler. Following the superintendent was the park float, the Black Rock fire engine with Smokey Bear and a law enforcement vehicle bringing up the rear. The park also participated in the community fair which immediately followed the parade. Rangers Cheri Volcelka and George Land staffed the booth and distributed park brochures, newspapers, guitar picks, pins, stickers and carabineers.







**17. June & July, 2011, TWENTYNINE PALMS SUMMER FILM SERIES IN THE PARK, LUCKIE PARK, TWENTYNINE PALMS**

Ranger George Land spoke to the audience prior to the screening of each film. Audience size was consistently 75-110. Topics covered included the 75<sup>th</sup> Anniversary, desert tortoise, Bill Keys, Native Americans in the park, Oasis of Mara, etc.

**18. June 15, 2011, "AN EVENING WITH RITA COOLIDGE" INDIAN COVE AMPHITHEATRE,**

A live music event was held at Indian Cove as a benefit for the JTNPA which featured Grammy-Award winning artist, Rita Coolidge. Local musician, Tim Easton, opened up the concert and was joined on stage by a local singer and songwriter, Victoria Williams for a duet. Local artist, Bobby Furst volunteered his time, talent and props to provide an impressive stage creation. Rita told stories of her association with the park including camping with music legend Leon Russell. Her rendition of "Amazing Grace" in the Cherokee language crowned the evening just as the moon rose over the rocks at Indian Cove.

An Evening With Two-Time Grammy Award Winner



# RITA COOLIDGE

At Indian Cove Amphitheater in Joshua Tree National Park

Wednesday, June 15, 2011 @ 7pm



JTNPA Members - \$100 donation | Non-Members - \$125 donation (includes membership)  
Only 160 Seats, First Come First Serve | Call 760-367-5535 or go online at [joshuatree.org](http://joshuatree.org)





**19. June, July, August, weekly, YUCCA VALLEY SUMMER MUSIC SERIES, YUCCA VALLEY BALL-FIELD, YUCCA VALLEY,**

The park provided an information table and uniformed ranger at all of the 8 concerts which occurred on Saturday night throughout the summer. Participating rangers were George Land, Cheri Vocelka, Bernadette Regan and Cynthia LaSala. The majority of the attendees were local and the response to the park was very positive.

**20. July 22<sup>nd</sup>, 2011, SOCAL WORLD GUITAR SHOW, THE FAIRPLEX, POMONA,**

Chief of Interpretation and Education, Joe Zarki attended and displayed the 75<sup>th</sup> Anniversary Commemorative Fender Guitar at the show. The SoCal show is one of the largest in the area for guitar aficionados. Newspapers and brochures and anniversary guitar picks were distributed to the attendees.

**21. AUGUST 10<sup>TH</sup> BIRTHDAY CELEBRATION, HEADQUARTERS, TWENTYNINE PALMS,**

The ceremony began at 8:00am and the attendees were seated under a erected canopy in the parking lot of park headquarters. In attendance were State Assemblyman-Paul Cook, Chris Carillo representing Senator Dianne Feinstein's office, Mark Troust representing Representative Mary Bono Mack's office, Pacific West Regional Office Deputy Director Martha Lee, San Bernardino County Supervisor Neil Derry, Yucca Valley Town Manager, Mark Nuiami, Twentynine Palms City Manager, Richard Warne and Yucca Valley Mayor George Huntington along with an audience of approximately 180 attendees. The rehabilitated Minerva Hoyt Mural was unveiled and members of the Pasadena Garden Club were on hand (Minerva's club) for photo an opportunity with Martha Lee and Mark Butler. Members of the Boys & Girls Club of Yucca Valley signed and sang, "America the Beautiful". A reception followed with cake and beverages.





**22. August 10<sup>th</sup>, 2011, GARY BURDEN PHOTOGRAPHY EXHIBIT, JTVC, JOSHUA TREE,**

The exhibit featured photography, design and narrative of Gary Burden and Henry Diltz. Burden and Diltz are award winning artists responsible for a number of music album covers photographed in Joshua Tree National Park. The exhibit included photographs of “The Eagles”, “America” and Mama Cass Elliott of the “Mamas and the Papa’s”. Burden was on hand to speak to the press as well as visitors.



**23. August 10<sup>th</sup>, 75<sup>th</sup> ANNIVERSARY SPEAKER'S SERIES, BELL CENTER, COPPER MOUNTAIN COLLEGE, JOSHUA TREE,**

Mr. Bill Wade, retired NPS superintendent and past president of the Coalition of National Park Service and Dr. Emilyn Sheffield, Dept. of Recreation, Chico State University spoke to approx. 100 employees and members of the community. Topics included the future and mission of the National Park Service, as well as stimulating interest and patronage of national parks by present day youth.



**24. August 10<sup>th</sup>, 2011, BOOK SIGNING-STARS ABOVE, EARTH BELOW: ASTRONOMY IN THE NATIONAL PARKS, JOSHUA TREE VISITOR CENTER**  
 Author, Tyler Nordgren signed copies of his book and chatted with visitors at Joshua Tree Visitor Center.



**25. August 10<sup>th</sup>, 2011, DINNER IN THE DESERT, SACRED SANDS BED & BREAKFAST, JOSHUA TREE,**

The Joshua Tree National Park Association sponsored a dinner for 100 people catered by the environmentally friendly “Green Truck” from the Los Angeles area. The “Green Truck” is a mobile catering service which uses reconstituted vegetable oil for fuel and features utensils fashioned from potato starch. Diners had a choice of chicken, salmon or pasta. The owners of Sacred Sands donated the location as well as the musical entertainment.

**26. August 10<sup>th</sup>, 2011, NATIVE AMERICAN CULTURAL PERFORMANCE “BIRD SINGERS”, INDIAN COVE, JTNP,**

Performers from the Agua Caliente Band of Cahuilla Indians were invited to share the traditional bird songs that have been passed down verbally within the tribe for hundreds of years. Over 120 people attended the performance around the campfire under the stars at Indian Cove Amphitheatre. Rangers participating in the event included Andrea Compton, George Land, Bernadette Regan, Kristin Lalumiere, Mitzi Harding and Tasha LaDoux.

**27. August 10<sup>th</sup>, 2011, NIGHT SKY PROGRAM, HIDDEN VALLEY PICNIC AREA, JTNP,**

Tyler Nordgren, Professor of Physics, Redlands University conducted the program. There were over 100 participants. Rangers Dave Carney, Cary Goldstein, David Cuyunu and Aubrey Diehl were on hand to assist the public.

**28. August 13<sup>th</sup>, 5<sup>th</sup> ANNUAL PERSEID METEOR SHOWER PARTY, INTEGRATRON, LANDERS,**

This event was a joint venture between JTNP and the Mojave Land Trust. The evening featured star-gazing, live music, night sky education and the opportunity for attendees to experience a “sound bath” in the Integratron. Rangers George Land and Stacy Manson, were in attendance as well as JTNPA President Chris Metzger. There were approx. 250 attendees and 250 direct contacts due to the invitation for Ranger Land to address the entire group.

**29. September 17<sup>th</sup>, 2011, YUCCA MESA IMPROVEMENT ASSOC. 50<sup>TH</sup> BIRTHDAY, COMMUNITY CENTER, YUCCA MESA,** Ranger George Land attended the festival and set up a park display with literature and other collateral for the public. The event was attended by approximately 400 people and the park had approx. 160 direct contacts.

**30. September 20<sup>th</sup>, 2011, 3<sup>rd</sup> BATTALION COMBAT ENGINEERS FAMILY READINESS PICNIC, BASE GOLF COURSE, MCAGCC,**

The park participated in “Family Day” for the Marines of 3<sup>rd</sup> Battalion Combat Engineers and their families prior to deployment to Afghanistan. The booth was staffed by Ranger George Land and JTNPA President Chris Metzger who distributed park brochures, newspapers, Mojave Max stickers and 75<sup>th</sup> Anniversary posters. 220 direct contacts.

**31. September 25<sup>th</sup>, 2011, MORONGO BASIN HISTORICAL SOCIETY, LANDERS,**  
Ranger George Land was on hand to swear in new society officers and speak to the audience about history of JTNP. There were 39 attendees/members present.

**32. October 8<sup>th</sup> & 9<sup>th</sup>, 2011, JOSHUA TREE ROOTS MUSIC FESTIVAL, JOSHUA TREE LAKE AND CAMPGROUND, JOSHUA TREE,**

The “Roots” festival is a two day event featuring an eclectic offering of live music performances. The park was present both days with the park EZ-Up. Rangers Joe Zarki and George Land, as well as association volunteers, Teddy Tapscott, Liz Morten and Diana Shay Diehl, staffed the JTNP booth for the event. The 75<sup>th</sup> Anniversary Commemorative Guitar was on location and the association sold tickets. Collateral material included park brochures, newspapers, guitar picks, anniversary pins and posters. Approx. 171 direct contacts.



**33. October 12<sup>th</sup>, 2011, PALM SPRINGS CITY SUSTAINABILITY CELEBRATION, PALMS SPRINGS CONVENTION CENTER, PALM SPRINGS,**

The event featured an assortment of businesses, non-profit organizations and government agencies involved in sustainable practices and or products. Rangers Dave Carney and George Land staffed the JTNP booth. Park brochures, newspapers, pins and posters were given to contacts. Information was provided on the park’s solar energy program. Approx. 125 direct contacts.

**34. October 15<sup>th</sup>, ARCHAEOPALOZZA, YUCCA VALLEY COMMUNITY CENTER, YUCCA VALLEY,**

The event was developed and produced by the JTNP Education Section at Black Rock. The theme was the science of archaeology and included exhibits, speakers and activities designed to increase education and awareness of the store of information provided by archaeologists. Rangers Lorna Lange, Dave Carney and Caryn Davidson staffed the event and were assisted by park volunteers, Anne Murdy and Marcia Hale. Approx. 168 contacts were made.

**35. October 15<sup>th</sup>, 2011, PIONEER DAYS PARADE, TWENTYNINE PALMS,**

Pioneer Days Parade is an annual event hosted by the Twentynine Palms Chamber of Commerce. JTNP was represented with a float, two fire engines, and a law enforcement vehicle. Park staff participating included Karin Messaros, Cheri Vocelka, Sean Murphy, Dan Messaros, Chrissy Speer, Aaron Newland, Ricky Holt and George Land. Smokey Bear rode in the lead fire engine. An estimated crowd of 1500 was on hand to watch the parade.

**36. October 21<sup>st</sup> – 23<sup>rd</sup>, 2011, CLIMBSMART, JOSHUA TREE LAKE & RV CAMPGROUND, JOSHUA TREE,**

Joshua Tree National Park co-sponsored this year's event in observance of the 75<sup>th</sup> Anniversary. Climbsmart is a annual, three-day event which drew over 100 climbers to participate in seminars, climbing clinics, gear reviews as well as service projects in JTNP. The park was represented on site with the EZ-Up and Rangers Bernadette Regan and George Land. JTNP Association was also on hand with the commemorative guitar and was staffed by association president, Chris Metzger. On Saturday night, a climber himself, Superintendent Mark Butler addressed attendees and was well received by the audience as he spoke about the sport and the responsibility that all climbers have with regard to protecting and preserving the resource. Superintendent Butler introduced key-note speaker and world renowned rock climber, Lynn Hill. Hill talked about her background and history in the sport and used film and slides to highlight her presentation. On Sunday, climbers assembled at Indian Cove Campground for a service project which was focused on replanting native species in the area.



**37. November 9<sup>th</sup>, 2011, “SHOW ME PALM SPRINGS”, PALM SPRINGS AIR MUSEUM, PALM SPRINGS,**

Show Me Palm Springs is an annual event that showcases attractions in the Palm Springs/Coachella Valley area. The attendees were primarily from the travel and hospitality industry ranging from concierges, tour companies and destination management professionals. Rangers Dave Carney and George Land staffed the JTNP booth. Collaterals distributed included park brochures, newspapers, posters, pins and stickers. There were 227 direct contacts which included a number of influential industry professionals.

**38. November 12<sup>th</sup>, 2011, 75<sup>TH</sup> ANNIVERSARY EMPLOYEE AND ALUMNI REUNION, ELKS LODGE, TWENTYNINE PALMS,**

Ranger Jeff Ohlfs, George Land, Becky Patterson and Cheri Vocelka organized the reunion which was attended by 90 employees and past employees. In attendance were 3 previous superintendents to include Ernie Quintana, David Moore and present superintendent Mark Butler.

**39. November 20<sup>th</sup>, CMC ASSOCIATION ANNUAL WREATH AUCTION, BELL CENTER, COPPER MOUNTAIN COLLEGE, JOSHUA TREE,**

JTNP participated in the annual fundraiser by donating a “Anniversary-themed wreath” constructed by Ranger Karin Messaros and provided a uniformed ranger, (George Land), at the event. The park wreath was auctioned for \$250.00 which was donated to the CMCA. There were 77 attendees/contacts. The park was acknowledged for being an important and concerned neighbor of the surrounding community in remarks by Dr. Roger Wagner, President of Copper Mountain College.

**40. December 2<sup>nd</sup>, 2011, CROSSROADS CONFERENCE, UCR PALM DESERT GRADUATE CENTER AUDITORIUM, PALM DESERT,**

The Crossroads Conference included subject matter experts speaking to an audience of 63 attendees and 21 park staff members on issues currently affecting JTNP. Dr. Ken Cole, Dr. Cameron Burrows, Dr. Leigh Welling were guest speakers and were joined at the podium by Superintendent Mark Butler and JTNP Chief of Resources, Andrea Compton. A question and answer session followed the presentation. A reception with cake and refreshments closed out the event.

**41. December 3<sup>rd</sup>, 2011, CROSSROADS CONFERENCE “PEOPLE IN THE PARK” BUS TOUR, JOSHUA TREE NATIONAL PARK,**

The culmination of the Crossroads Conference was a bus tour of Joshua Tree National Park. Rangers Karin Messaros and George Land escorted two chartered motor coaches from a Palm Desert pick-up location and a Desert Hot Springs location. Park brochures and anniversary pins were handed out to participants. A total of 64 visitors split between two buses spent 3 hours in the park touring sites at Keys Lookout, Cap Rock, Jumbo Rocks and Hidden Valley picnic area. Both groups had the opportunity to visit the JTNP bookstore and visitor center(s) at Joshua Tree and Oasis. Only about a third of the participants had ever visited the park before. The tour drew many favorable comments and was an overall success.

**42. December 6<sup>th</sup>, 2011, MORONGO BASIN REGIONAL ECONOMIC CONSORTIUM SPEAKERS EVENT, TWENTYNINE PALMS COMMUNITY CENTER, TWENTYNINE PALMS,**

This speakers' series main focus was on the impact and influence of national parks on surrounding gateway communities. Guest speakers included Bret Meldrum, NPS, Dan Peacock, NPS, Dr. Dan Stynes, Michigan State University. Local community leaders also participated and included Mark Nuaimi, Town Manager Yucca Valley, Richard Warne, City Manager Twentynine Palms and Maureen Snelgrove, Deputy Director for San Bernadino County Regional Parks. Owen Gillick was Master of Ceremonies and Superintendent Mark Butler welcomed attendees and provided opening remarks. There were 52 attendees and 11 park staff.

**43. December 7<sup>th</sup>, 2011, WESTERN GOVERNORS ASSOCIATION CONFERENCE, YUCCA VALLEY COMMUNITY CENTER**

The Western Governors Association hosted a public forum as part of their winter meeting in Yucca Valley which was attended by several hundred interested citizens. Governors in attendance included, Gov. Jan Brewer, Arizona, Gov. Chris Gregoire, Washington, Gov. Gary Herbert, Utah and Gov. Dennis Daugaard, South Dakota. A panel of local business and government stakeholders included Neil Derry, San Bernadino County Supervisor, Paul Smith, President of Twentynine Palms Innkeepers Association, Frank Hugelmeyer, Executive Director, Outdoor Industry Association, Ron Krueper, District Superintendent, California State Parks and Mike Cipra, National Park Service. This year's initiative was "Get Out West", focusing on growing tourism and recreation economies in the west and connecting urban kids with outdoor recreation opportunities. The governors proceeded to Black Rock at JTNP and observed a group of high school students from Cathedral City High School on a field research project directed by the park education department. Tours of Keys Ranch and Hidden Valley were offered to staff traveling with the governors as well as the participating public.

**44. December 16<sup>th</sup> -75<sup>th</sup> ANNIVERSARY PHOTO CONTEST EXHIBITION, JOSHUA TREE NATIONAL PARK VISITOR CENTER, JOSHUA TREE**

80 photographers took part in the 75<sup>th</sup> Anniversary Photo Contest which allowed entrants to submit photos from April 15<sup>th</sup> - July 15<sup>th</sup>. Three photos were awarded 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> prize. The first prize photo will be featured on the 2012 Joshua Tree National Park Annual Pass. Participating photographers were invited to submit photos for the exhibition. Approximately 40 photographs were on exhibit and will be displayed until spring 2012.

## NON-EVENT MARKETING AND OUTREACH

1. **PUBLICITY** The JTNP 75th Anniversary year received a substantial amount of coverage from the press, radio, television and electronic media. A custom website was developed and supported by Jim Harvey who donated his time and expertise. High Desert Publishing and The Sunrunner both highlighted the anniversary with park-dedicated issues and The Sunrunner ran the 75<sup>th</sup> logo on the cover of all editions for the year. Press releases relating to events and programs were routinely published in the Desert Sun in the lower desert as well as the Desert Trail and Hi Desert Star. Copies of press clippings are included in the 75<sup>th</sup> Anniversary master file.
2. A special 8-page commemorative 75<sup>th</sup> Anniversary supplement to the Joshua Tree Guide was produced in February. Written by park staff and numerous guest authors, designed by R&W Creative, and produced by Visual Information Specialist Sandra Kaye, the Anniversary newspaper included a timeline of park history that was extended all the way out to the National Park Service Centennial in 2016.
3. A number of internet outlets; (National Parks Traveler, Mountain Project, Frommers.com, USA Today.com) and a host of others regularly reported on the park and the anniversary activities. KNEWS FM 94.3 personality Bill Feingold, interviewed Rita Coolidge prior to her performance in the park and KPSP Local 2 television covered several events of the August 10<sup>th</sup> birthday celebration including the Gary Burden Exhibition.
4. In an effort to recognize the contribution of the park to southern California's cultural history, Grammy-award winning album art director Gary Burden of Malibu created and donated an entire exhibit to the park to commemorate albums by famous California musicians that depicted scenes from Joshua Tree National Park. The exhibit featured photographs by Henry Diltz and album photos of musical acts America, the Eagles, and Mama Cass Elliot. The exhibit was hosted at the Joshua Tree Visitor Center from August 10 to December 16 and was viewed by more than 30,000 people.
5. Two commemorative 75<sup>th</sup> Anniversary issues were developed by local publishers, the Hi-Desert Star and the *SunRunner*. Kelly O'Sullivan worked with park staff on a special Anniversary Edition of the *Basinwide Spirit* in the spring, and Steve Brown and staff published an Anniversary issue of the *SunRunner* in mid-summer. The *SunRunner* featured the 75<sup>th</sup> Anniversary logo on the cover of every issue during 2011.
6. **BILLBOARD** A billboard location in Yucca Valley on eastbound 29 Palms Hwy. was donated by a local businessman. R&W Creative designed the artwork and the theme "Wander in Wonder" promoted the park and the 75<sup>th</sup> Anniversary for most of the year. The Graphic was removed at the end of December.
7. **BANNERS** 20 banners with the JNTP 75<sup>th</sup> Anniversary logo adorned the light poles of downtown Twentynine Palms along both sides of Hwy 62. The banners were prominently featured until two weeks before Christmas.

8. **POSTERS** A quantity of 2000 75<sup>th</sup> Anniversary posters were printed and distributed to all local chambers of commerce, (high and low desert), individual merchants and professional offices. They were also handed out at outreach events and at the park visitor centers.
9. **PINS** Over 2500, 75<sup>th</sup> Anniversary pins were distributed during the anniversary year. The pins were extremely popular with the public and were distributed at many of the outreach events as well as ceremonies and conferences that occurred during the year.
10. **COMMEMORATIVE GUITAR** The Fender Guitar Corporation was contacted by RW Creative and agreed to produce (4) 75<sup>th</sup> Anniversary Commemorative Guitars for the park's celebration. RW Creative maintained possession of one, and the other three were given to the park. One is in the park's archival collection and the other two were part of a "drawing of chance" operated by the Joshua Tree National Park Association as a fund-raising event.
11. **JOSHUA TREE NATIONAL PARK EZ-UP** The park ordered a custom-printed EZ-Up to create a professional and easily-recognizable presence at outreach events and programs.



## **ADMINISTRATIVE TEAM**

The Administrative team provided a number of operational support services for Joshua Tree National Park. Fiscal year 2011 brought about many changes in how JOTR performed administrative functions. All divisions of the park have been involved in the transformation and are working toward a more functional and supportive administrative group.

At the beginning of FY11, the vacant Administrative Officer position was filled with Pat Greer, who came to JOTR from Assateague Island National Seashore. The Superintendent's position was also vacant, and the park had two acting superintendent assignments, before the newly appointed superintendent, Mark Butler entered on duty in mid February. During FY11, the administrative team had two members who moved onto different interests. Cheri Vocelka officially moved from a program assistant position and applied for, and earned the Superintendent's Secretary position. Melissa Moe, who was working within a STEP appointment resigned to enjoy her increasing family. One position was already vacant. The resulting three vacant positions seriously impacted the ability of the administrative group to provide timely services. The administrative team worked together to devise methods of supporting the park. The park saw workloads shift, new skills learned and a work team pull together to complete necessary processes.

The routine administrative functions of travel, payroll, time keeping, office support, mail, shipping & receiving, budget planning, formulation, tracking and fiscal year closing, internal control audits, charge card program management, IDEAS support, closing of third party draft program, and others were completed by very committed staff.

### **Budget and Finance**

With a new AO and a new Superintendent, the budgeting process was modified. The administrative staff and other key employees worked to successfully close the 2011 park operational budget with \$.06 remaining of a park allocation of \$6,128,700. The leadership team worked on a zero based budget exercise and proactively worked toward a solid working 2012 budget in anticipation of the coming fiscal year.

The park met the 35% carry over level in the FLREA program. This was largely due to the creation of the Project Services Group of interdisciplinary staff to work with administration to review the overall program and the responsibilities of project managers. PSG wrote criteria, held many facilitated meetings to reach a point where the park now has a developed five year plan and an annual work plan to continue to meet the required 35% or less carry over amount. Administration dedicated an employee to the PSG team. This again caused additional workload shift on the smaller administrative team.

### **Housing**

A new draft housing addendum for the Black Rock Interagency Fire Center Dorm was written. The remaining housing addendum for JOTR quarters is also in draft. New furniture was purchased for one duplex. Swamp coolers were upgraded.

**Information Technology**

The Information Technology Specialist maintained services to JOTR and Mediterranean & Mojave Network equipment. Daily security reviews of systems were completed, and system backups and off-site storage was maintained. JOTR did not succumb to any virus attacks throughout the year. Recovery of lost data was completed for maintenance and resources management employees. Approximately 510 requests for assistance tickets were closed for JOTR. Weekly phone support was provided for all help desk requests. Cruz participated in the monthly regional conference calls to gain information, resolve network and park support issues. Worked with PWR on the VoIP preliminary work, installation was postponed due to PWR office move and resulting workload.

The Administrative Officer provided technical, regulatory and policy information to the leadership team. Supervision, training, and mentoring were supplied to the administrative team and other park staff as requested. Pat supported the park with budget and fiscal expertise and worked with administrative staff to complete the fiscal year close. New quantifiable EPAPs were written for administrative staff with input and review by subordinate staff. Training was provided to park staff in AFS3 and project management expectations. A daily safety minute session was instituted. Administrative staff took the initiative to create monthly vehicle check logs, office/building safety check lists and is continuing the monthly training for vehicle maintenance inspections, and office inspections.

**Procurement**

Joshua Tree is fortunate to have a MABO contracting officer (C.O.) duty stationed at headquarters. The C.O. completed certification/warrant training for construction contracting. She was mentored by the supervisory lead C.O. for the LAKE MABO in construction contracting and received additional onsite support for training purposes. Contracting services were provided to JOTR and four other parks within the LAKE MABO. The C.O. attended MABO conferences, received continuing education through mentoring by the MABO lead in all areas of contracting. She completed a MABO contracting file audit. She worked with the LAKE property training and on-going support as property is transferred to administrative staff correcting a conflict in duties for the C.O.

**Property**

During property training provided by LAKE, administrative staff located and identified vehicles that had been reported missing for many years. Excess property was identified and documentation prepared for recycling at UNICOR. JOTR had a successful property sale reducing the park inventory of excess vehicles/equipment. Administration worked toward a 100 personal property inventory. Lost and found was one of the programs that was negatively affected by the decrease in staff. However, many items were returned to visitors, serviceable unclaimed winter jackets were donated to the JOTR education program for school children attending programs in the park.

**Staff Training**

The administrative team had multiple training opportunities during 2011. The administrative assistants, (Vic Scott, & Jeannie Campbell) budget analyst, (Deb Gaunt), information management specialist (Cruz Jimenez), and contracting officer, (Michelle Harrison), all received

training, mentoring and support from within JOTR and many other sources to enhance their skill sets. Some of the training received was in AFS3, Appropriations Law, QMIS, Cisco systems, IT conference, MABO conference/training, FAR Immersion, construction contract mentoring, fire time keeping, HROC/SHRO updates, OWCP, OSHA, Fundamentals V, Operational leadership, PMIS on-line training, Project Management, Property Management, fire training refresher, mandatory agency training (IT security, whistleblower, EEO, etc), fire extinguisher and first aid training. Within the division, cross training continues to ensure the available administrative staff can provide a multitude of services.

### **FACILITY MANAGEMENT TEAM**

FY11 was another dynamic year in the Facility Management division at JOTR. Facility Manager John Slaughter accepted another job, which was a promotion to his first Superintendent's position. Roads Foreman Kirk Diamond served in an acting capacity for four months and then Mr. Doug Crossen arrived in an acting capacity for 3 months.

#### **Facility Management Administration**

During Fiscal Year 2011, Marilyn Lutz, Lynda Murphy, and Jeannie Campbell provided Maintenance Management support.

#### **Budget**

The ONPS budget was tracked, including housing and Centennial Initiative funding, and soft money accounts, including four ARRA, 7 cyclic accounts, one 2 FY10-11 repair/rehab accounts, three FY11-12 repair/rehab accounts, an equipment replacement account, about 25 on-going fee accounts and other monies including two YCC accounts, and several other special accounts.

#### **FMSS**

Marilyn provided park-wide support for the Facility Management Software System (FMSS), by entering information on park assets and deferred maintenance. Comprehensive condition assessment work orders were created for all park locations. Work orders for projects and project components were generated and entered in the Project Management Information System (PMIS) through the Project Scoping Tool (PST) for facility projects, park-wide. Deferred and corrective maintenance work orders were generated and costed as needed. Work was documented in FMSS for park operations and maintenance projects. We improved our park FMSS completeness and accuracy scorecard from 78% to 99%.

#### **Operations**

Lynda, Jeannie and Marilyn handled administrative tasks for the Maintenance Division, including budget programming, payroll, purchasing, and travel. Marilyn coordinated GSA Motorpool for the park fleet of 53 vehicles. Lynda took a job promotion with BOR in August and left Joshua Tree for Hoover Dam. Jeannie Campbell filled in behind Lynda, in a lateral transfer from Theodore Roosevelt NP. Marilyn and Jeannie participated in the business center and assisted with year-end closing.

## Safety

Lynda was a member of the safety committee. Marilyn promoted office safety, GSA motor vehicle safety, and implemented the Maintenance Safe Driver of the Month program.

## Sustainability

Lynda and Jeannie tracked the DesertArc recycling program. FY11 totals for volunteer hours, pounds of recyclable materials, and dollars redeemed and returned to the DesertArc program are pending receipt of the crew's monthly reports. Marilyn compiled data on photovoltaic power generation, propane usage and other facility information for the annual energy report.

## Buildings & Utilities

### Cyclic Maintenance

- **Performed Cyclic Maintenance on Building Exteriors** consisted of installing a three part stucco process to the exterior of the Black Rock Maintenance building. Nine windows were upgraded to dual pane and 2 exterior doors were replaced with metal jambs and fire rated doors.
- **Interior Painting** consisted of cyclic interior painting on 4 assets in the park. Total square footage was approximately 30,000 SF. The Pinto Wye Maintenance Office, North Entrance Fee Office, HQ Protection Office, and the Cottonwood Visitor Center received low VOC latex coating.
- **Perform Cyclic Lighting Maintenance** consisted of retrofitting light fixtures, switches and timers to the HQ Administration Building, HQ Office/Storage complex, and the West Entrance Fee Station. Motion and lighting sensors were installed on the exterior and interior of buildings. Solar night sky friendly walkway lights were also installed in the HQ area of the park.
- **Grounds and Associated Amenities** consisted of cyclic upgrades to the grounds of the Indian Cove Ranger Station. A new flag pole, two picnic tables, trash receptacles, recycling receptacles, landscaping, and 320 LF of fencing was replaced.
- **Perform Cyclic Maintenance on Irrigation System at Headquarters** consisted of the repair of degraded PVC and galvanized pipe sections and connections. Repair of sprinkler and fountain heads, pressure fittings, unions, and controls. Maintaining public drinking water fountains and dedicated potable lines to ensure visitor health and safety. 28 solar timers were installed throughout the entire system as well as new valves to the public drinking fountains. Two backflow preventers were installed to ensure potable drinking water is protected from contamination. 1,100 LF of drip system and sprinkler heads were replaced.
- **Perform Comfort Station Amenities Maintenance** consisted of upgrading restroom facilities with ADA compliant toilets, sinks, railings, and partitions to the Black Rock Nature Center and HQ Visitor Center. Also included was repainting of the interior walls and installation of sustainable tile flooring.

### Repair/Rehab

- **Repair Piping and Circulation Systems to Cottonwood and Black Rock Water Tanks**, consisted of purchasing and installing mixing and chemical injection apparatus and also installing dedicated drain pipes to the water tanks. The first phase of the project

is nearing completion in FY11. The mixing apparatus is installed and the chemical injection system is being installed. Planned completion is FY12.

### **Operations**

- Retrofitted the existing worn out evaporative cooler at the Black Rock Education Building with a more efficient unit.
- Installed switch gear at the Cottonwood Maintenance shop for the PV system.
- Installed two new HVAC condensers for the Administration building.
- Assisted with a small remodel in the Association building.
- Moved the Education division to the Black Rock Nature Center which required upgrades to the offices to accommodate operations.
- Assisted with the 75<sup>th</sup> Anniversary events including building a portable stage for a concert and assisting with the preparation of a parade float.

### **Campgrounds**

**Campgrounds:** The campground personnel managed to meet and exceed all production goals for fiscal year 2011. On a daily basis and through individual dedication and extra effort, each of our 5 employees maintained a robust and vigorous maintenance schedule of operations that include: 7 overnight campgrounds, 25 day-use areas, 62 single vault toilets, 15 double vault toilets, 86 trash dumpsters, 27 recycle bins and also managed to provide routine custodial operations at the Park's Visitor Center and 9 comfort stations.

- **Operations,** the campground personnel have pressure washed 86 dumpsters, repaired locks and hasps on recycle bins, removed graffiti off vault toilets doors, walls, boulders and off picnic tables. Also repaired table top and bench planks on concrete picnic tables.

They have removed ashes from 496 fire rings and 202 grills in a twice a year cycle. Each campsite has been groomed, and roadside litter pickup performed.

Other general maintenance work throughout the park included the repair and replacement of unserviceable lights.

On vault toilets 20 door adjustments, replaced 15 door hinges, replaced 14 vault Toilet privacy locks.

The Bob-Cat Loader was utilized place large boulders in areas to protect resources from visitor impacts.

Campground and custodial personnel were tasked to clean Black Rock Fire Dormitory, and Lost Horse Artist Residence.

Campground personnel setup and broke down for the Joshua Tree Annual Art Festival.

Campground personnel setup and broke down for activities given for the 75<sup>th</sup> Birthday and the visit by the Secretary of Interior to Joshua Tree National Park.

- **Pumping of waste from vault toilets and septic tanks**, working throughout the year with a private contractor the campground personnel assisted in the Pumping of 90 vaults and 3 septic tanks. Through numerous pump-down operations over 97,200 gallons of waste (90 vaults 83,880 gallons and 3 septic tanks 13,320 gallons) were transported and disposed by contractor.
- **Environmental Management System (EMS)**, the Park has recycled 172 lamp feet to the Mercury Technologies of Minnesota, Inc.

### **DesertArc Partnership Program**

Joshua Tree National Park has partnered with DesertArc: the mission of DesertArc is to enhance the quality of life for people with developmental disabilities. Services include supported employment, on-site vocational training and employment, respite, supported living services, and partnerships with many organizations and businesses throughout the Coachella Valley and Morongo Basin.

DesertArc offers community employment services to persons with developmental disabilities regardless of the type of disability. The Supported Employment Department assumes that all people, regardless of disability, are capable of productive, meaningful work in any setting if they are given the necessary support, which they feel is the key to job success.

Our maintenance division continues work with 5 individuals as back-up to accomplish custodial work at the headquarters area, cleaning 1 Visitor Center, 5 office buildings and 11 comfort stations. The custodial personnel have also assisted in other projects. .

### **DesertArc Recycle Partnership Program**

The park has partnered with DesertArc volunteers for collection of the park's recycling materials. The Desertarc Recycle Partnership Program will meet the commitment of the Park's sustainable park operations as outlined in the Integrated Solid Waste Alternatives Program

## **Roads**

### **Roads Operational Projects**

Our Operational projects include hauling water to all of the park's non potable water storage tanks twice a month covering approximately 80 miles in a single day using over 2000 gallons each time we filled the tanks. That equates to 160 miles round trip and 4000 gallons of water delivered per month.

Other operational needs that were met in fiscal year 2011 were grading and maintaining 96 miles of paved and 109 miles of unpaved surfaces. We re-stripped crosswalks, stop bars, stop symbols and parking stalls, repaired and replaced signs park wide, removed litter from roadsides, campgrounds and parking lots. The road crew fabricated and repaired access gates park wide.

On the morning of September 13, 2011 a major storm system occurred at Joshua Tree National Park in the Pinto Basin and Cottonwood areas. A second storm system came through during the evening of September 13, 2011 affecting the same areas. The heavy rainfall resulted in flash flooding causing damage to paved and unpaved roads, shoulders, low water crossings, erosion

control devices, campgrounds, trails, parking areas, historic properties and other facilities. 14.36 miles of paved, 23.5 miles of unpaved and 65,297 square feet of parking areas, 8 miles of Trails, 65 campsites and facilities were affected.

During the clean up process, our crews removed and replaced approximately 3335 square feet of damaged road and road edge from mile post 24 to 25 and mile post 29.5 on Route #11, saw cut damaged sections of pavement, removed asphalt and placed approximately 200 tons of class II road base to provide a stable base for asphalt patches and shoulders. We removed and relocated native soils deposited on roadway from flash flood, placed in obliterated shoulders, compacted and finished grading 13 miles of road shoulders.

### Equipment Replacement Program

- Replaced one 1986 Case 3 ton compaction roller with a new Caterpillar compaction machine.

### Road Projects Funded by Fees

- **Repair, Rehabilitation and Reconstruction of Drainage and Erosion Control in Black Rock Campground to Reduce Storm Runoff Impacts**  
Work continues on this long term project; Denver Service Center Staff continue to assist with project planning and processes.
- **Delineate, rehabilitate and restore 13 of 15 non-designated parking pullouts on Route #12.** Three to four foot boulders were placed to delineate the impacted sites and help eliminate the potential for further disturbance. Parking areas that were removed completely were restored using vertical mulch, fencing and native plants grown in the park's nursery.
- **Schematic designs were completed** for the Planning and Design Work for the Visitor Overflow Parking Route 900A

### Repair Rehab Projects

- **Repair and Rehabilitate Asphalt Road Edges on Park Route # 11.**  
Armored the unstable shoulders and widened the existing asphalt surface on Route # 11 from mile marker 21 to 25. Upon completion of the asphalt edging, it was resurfaced with Slurry Seal.



## Trails - Projects and Accomplishments

### Safety

- Facilitated daily tailgate safety meetings.
- Supervised up to 27 employees with no lost time accidents in FY11.

### Administrative Accomplishments

- Input 4 new projects during the Service-wide Comprehensive Call through the Project Scoping Tool and into PMIS
- Participated in planning meetings with resource management to mitigate social trail concerns
- Completed 12 Job Hazard Analyses
- Provided NPS Fundamentals 3 & 4, Agreements and Contracting Officers Training, Risk Management training, ARC View GPS training, Sign/Leadership training for employees
- Contributed to the Joshua Tree National Park General Management Plan planning processes
- Recruited disability/diverse hires for JTNP and Alaska region.
- Completed 3 new volunteer position descriptions
- Supervised VIP Greg Mendoza in trail condition assessments for 110 VIP Hours
- Supervised VIP's performing trail work 1100 documented hours.
- Completed Leadership/Teambuilding for Youth Conservation Corps



### In Park Projects

- Conducted successful Youth Conservation Corps program with 23 YCC enrollees
- Facilitated construction and installation of 112 directional and information trail signs
- Rehabilitated the 2-mile Long Split Rock Loop Trail
- Removed graffiti at Jumbo Rock Campground and Cap Rock Picnic Area Parking
- Replaced damaged trail signs throughout the park.
- Facilitated installation of resource protection fencing and social trail mitigation at Key's View Parking Area

- Rehabilitated the California Riding and Hiking Trail by completing 15,840 linear feet of trail tread work by clearing and brushing, and, cleaned out approximately 20 water bars and installed two new water bars.
- Rehabilitated the Lost Horse Loop by constructing 10 linear feet of stone steps. Trimmed 15,840 linear feet of trail. Constructed and installed 2 directional signs and 1 trail head sign. Trimmed 200 linear feet of dirt road leading to Lost Horse trail. Installed 15 interpretive signs on Indian Cove Nature Trail. Installed 15 interpretive signs on the trail system in cottonwood.
- Assisted in the planting of 200 desert plants at Center for Arid Lands Restoration
- Installed and designed 10 climber access signs
- Replacement of 27 deteriorated road signs
- Surveyed, using GPS technology, 18 miles of designated trail and 14 miles of proposed trail for park archives and databases

#### **Partnership projects:**

- **Mojave National Park-** The crew assisted the maintenance of a hiking connector trail. The crew assisted the American Hiking Association volunteers with maintaining 3 miles of trail. The crew completed 17,200 linear ft. of trail delineation. The crew also installed a retaining wall for 16 sq. feet of rock work.
- **Urban School of San Francisco-** The crew worked with over 75 volunteers from the San Francisco based high school to perform repairs to Split Rock Trail. The crew and the volunteers delineated tread on 2500 linear feet of trail and repaired 12 waterbars along the route.
- **Devil's Postpile National Monument-**The NPS trail crew and the JTNP YCC crew traveled to the Monument to provide trail maintenance assistance on Devil's Postpile Accessible Trail, King Creek Trail, and the John Muir trail. Completed 4520 linear ft. of brush trimming on the John Muir Trail. They installed 4 yards of soil stabilizer on tread surface of Devil's Postpile Accessible trail. Installed 9 wooden steps on Rainbow Falls Trail. Installed a stone rip rap section for 130 sq. ft of rock work on King Creek Trail
- **Great Smoky Mountains National Park** - Responded to a Tornado Damaged trail on Little Bottoms trail. Removed 125 downed trees on 5 miles of trail.

### **INTERPRETIVE AND EDUCATIONAL TEAM**

For Interpretation, FY2011 was a year marked by milestones, history, and transition. The park dedicated much time and energy to the celebration of its 75<sup>th</sup> birthday during 2011, and the Anniversary became the focal point of many Division activities. It was a year of partnering, planning, and presenting as the park hosted a wide variety of special events during our year-long anniversary celebration. Working with 75<sup>th</sup> Anniversary Coordinator George Land, Division staff was directly involved with coordinating or supporting many of the year's Anniversary activities.

#### **Partnerships**

Many individuals and organizations helped with activities connected to the Anniversary celebration. Venice, California design firm R&W Creative provided design, marketing, promotion, and branding services for the entire year. R&W developed the Anniversary logo created Anniversary business cards, stationery, posters, event materials, ads, product designs,

and concepts. R&W recruited numerous corporate partners who contributed to some of the year's most memorable activities including a 75<sup>th</sup> birthday dinner with food provided by the Green Truck of Los Angeles. R&W also created the design for a 75<sup>th</sup> Anniversary commemorative guitar and enlisted corporate partner Fender Musical Instruments to develop and donate three of the custom-design guitars to the park. One of the Anniversary guitars was placed in the park's museum collection, while the other two were raffled off as a fundraiser in conjunction with the Joshua Tree National Park Association.

### **Non-Anniversary Interpretation Division Activity**

#### **Interpretive Operations**

The statistical breakdown and two-year comparison for Division interpretive operations is as follows:

	2010	2011
<i>Visitor Center Traffic</i>	318,457	311,081
<i>Ranger-led Programs</i>	20,457	22,283
<i>Roving</i>	21,253	17,946
<i>Education Programs</i>	22,886	18,063
<i>Junior Ranger Programs</i>	4,252	4,495
<i>Special Events/ Community Programs</i>	8,151	9,986
<i>Materials Distributed</i>	381,000	519,500
<i>Web-site Use</i>	Not available	Not available
<i>Total Visitor Services</i>	776,546	903,354

In 2011, special events and community programs were up over 2010 as the park committed staff resources to 75<sup>th</sup> Anniversary events in local communities. By contrast, roving numbers were down in 2011 for much the same reason— staff were committed to external activities.

Dave Denslow took over the role as Division Liaison to the local Marine base when Pam Tripp assumed her new position as Cottonwood Area Interpreter in September. Dave now plans and presents the Welcome Aboard program to new base recruits and their families. Marine personnel have become an important source of volunteers for the park in recent years.

Interpretive Rangers Dave Carney, Pat Pilcher, and Sue Spearing worked with the Cultural Resource Management staff on the integration of the newly restored McHaney Cabin at Keys Ranch. The cabin was restored with the help of a donation from the Ray T. Jr. and Martha Parfet Fund of Hickory Corners, Michigan. Other Keys Ranch activity in 2011 included the development of a podcast about visiting the Ranch, continued expansion of the living history component of the program, and the development of a new evening tour service for visitors.

#### **Interpretive Media**

Non-Anniversary activities in 2011 included the installation of new trail exhibits for the Indian Cove and Cottonwood Nature Trails. Work was initiated on a variety of other interpretive media projects including replacement of the exhibits at the Black Rock Visitor Center and minor renovation of the Oasis Visitor Center exhibits.

Exhibit Specialist Anne Staley provided significant support for several Anniversary exhibits including the Gary Burden album cover exhibit in August and the 75<sup>th</sup> Anniversary photo exhibit in December.

Through the efforts of Sandra Kaye, the park launched its first official Facebook site in 2011 and continued to develop and grow its Twitter presence. The public responded to our Facebook posts and photos with 23,272 views, 138 comments, and 355 likes. The park Twitter site grew to 146 tweets, 1473 followers, and was included on 152 lists.

### **Education and Youth Outreach**

The Education Branch oversaw several Recreation Fee projects designed to bring underserved school populations to the park. Sixty buses brought 3,429 students to Joshua Tree through these projects. Education rangers also developed a special summer program called Kaleidoscope for local Gifted and Talented Education (GATE) students. The program was well received, and there are hopes to expand it in 2012.

### **Staff Changes**

Cottonwood Interpretive Ranger Lesley Gaunt transferred to Scottsbluff National Monument in July and was replaced by Pam Tripp.

### **Artist-in-Residence Program (AIR)**

Artists participating in the FY2011 Joshua Tree Artist-in-Residence program included:

Eric Russell Martin, a sculptor from Oakland, California,  
 Naida Oslone, a photographer from Riverside, California,  
 Shayna Keller, a choreographer from Studio City, California,  
 Carrie Millner, a writer from San Francisco, California  
 Michael Kenny, a photographer from San Francisco, California

Exhibits, performances, and cultural events hosted for the public by visiting AIR participants were attended by 82,727 park visitors in 2011. Park Ranger Caryn Davidson serves as the park's Artist-in-Residence Coordinator.

### **Volunteer Program**

The park volunteer program recorded 44,315 hours in 2011, the highest total ever. The breakdown by program area is shown below:

Administration:	108 hours
Campground Host:	2,339 hours
Cultural resources management:	1,632 hours
Interpretation:	13,694 hours
Maintenance:	2,721 hours
Natural resources management:	11,405 hours
Protection/Fees/Emergency Services:	5,227 hours
Training:	7,189 hours

Long-time park volunteer coordinator Laureen Lentz retired in July. Joshua Tree Exhibit Specialist Anne Staley stepped in as Interim Volunteer Coordinator in mid-September and quickly organized the park's National Public Lands Day event on September 24.

The park recognized in 2011 a number of Master Volunteers who have made ongoing contributions to the park:

Jerry Seaburg, Roving/Keys Ranch Site Steward, Interpretation  
 Dave Pylman, JOSAR, Protection  
 Phil Spinelli, JOSAR, Protection  
 Trevor Allen, Recycling Program, Maintenance  
 Vincent Fulman, Recycling Program, Maintenance  
 Taney Spencer, Recycling Program, Maintenance  
 Greg Mendoza, Backcountry Rover & Site Steward, Resource Management

### **Cooperating Association Activities, 2011**

The Joshua Tree National Park Association provided partnership services to the park through the year as it coordinated a 3-way agreement between the Association, the park, and R&W Creative for carrying out many of the Anniversary year's activities. The Association produced a wide array of 75<sup>th</sup> Anniversary commemorative items, staffed special events, and oversaw several public Anniversary activities.

On January 29, the Association presented the annual Minerva Hoyt California Desert Conservation Award to Mark Bagley and the Owens Valley Committee for the Committee's years of work in seeking to restore water to the Owens River valley ecosystem. The award was presented to the Owens Valley Committee by Board President Mark Wheeler at the park's 75<sup>th</sup> Anniversary Kick-Off event.

In April, the Association, working with R&W Creative, launched the 75<sup>th</sup> Anniversary Photo Contest. More than 80 photographers entered over 500 images of the park. Photos were entered in the contest and initial public voting was done through Facebook. The winning entry by Tom Parash was announced at the August 10 celebration ceremony at the Oasis Visitor Center.

In mid-June, the Association presented the Rita Coolidge concert at the Indian Cove Amphitheater. The concert, *An Evening with Rita Coolidge*, was conducted as a fundraising activity and raised over \$7,000.

On August 10, the Association hosted an eco-friendly "Dinner in the Desert" at the Sacred Sands Bed & Breakfast in collaboration with R&W Creative and the Green Truck of Los Angeles. More than 125 park friends were served a delicious eco-friendly dinner at the culmination of a day-long birthday celebration.

Also on August 10, the Association launched the 75<sup>th</sup> Anniversary Guitar Raffle. This very special fundraiser helped JTNPA to add \$2,381 to the Legacy Project balance and served as a highly visible and creative way of spreading the message about the park's cultural past. In conjunction with the raffle, the Association sponsored attendance by the park at the Los Angeles

World Guitar Show in Pomona, California where more than 140 people including many guitar dealers and collectors saw and played the Anniversary guitar. This unique instrument served as a magnet for public engagement wherever it was shown throughout the year. The guitar raffle involved a partnership with the Fender Music Foundation who assisted with the promotion of the guitar raffle. On December 3, two winners of the Anniversary guitars were chosen, Martha Lee of San Rafael, California and Don Magub of Pioneertown, California.

### **Fundraising**

Apart from 75<sup>th</sup> Anniversary activities, other fundraising events (the annual Art Festival and two new events in the community) and membership appeals generated over \$9,500 in donated funds for the Legacy Project.

### **Visitor Center operations**

Visitor center traffic was 311,081 people in FY11. Sales increased in FY 2011 at all four visitor center locations, contributing to another year of record revenues for the Association: over \$1,396,000.

### **Desert Institute**

The Desert Institute enjoyed a year of strong enrollment, offering weekend adult education programs to over 550 participants, and reaching over 1,200 attendees through lecture series with community partners throughout the park's gateway communities.

## **RESOURCES TEAM CULTURAL**

### **Archeology**

#### **Boundary Inventory: Year 2 of 3**

In FY11, Phase 2 of 3 of a park boundary inventory was conducted in the Morongo Basin near developed areas. The FY11 inventory covered 401 hectares (991 acres). This phase of the project focused on surveying portions of the park boundary in the foothill area of Twentynine Palms, 49 Palms Canyon, Panorama Heights, and the park's west and north entrances. Eight new archeological sites and 439 isolated artifacts were field recorded. When the records are completed they will be sent to the Eastern Information Center and information will be added to the park's ASMIS and GIS databases and cultural resource files. The addition of this information provides baseline data that will allow the park to better understand site types, distribution, and potential impacts to cultural resources. Thus far, the project has illustrated that cultural resources along the park boundary and urban interface are indeed threatened by the effects of encroaching development. The addition of this baseline data will allow us to better understand the scope of these impacts when they occur. A partial draft report was begun for this phase and some GIS entry was also started.

#### **Conducted field inventory of Developed Areas**

In FY11, the in-house archeology crew, with the assistance of volunteers, continued conducting inventory and site recordings in park developed areas with the intent of promoting interpretation of cultural resources. To date, Geology Tour Road, Desert Queen Mine Road, and Stirrup Tank Road have been surveyed. The survey resulted in five new recorded archeological sites and one major site record update. The Geology Tour Road inventory was done first to help with editing

of the self guided tour brochure, which is to be reprinted soon. Prehistoric milling slicks have been found that can be interpreted at the intersection of Stirrup Tank Road, and a potential area near the Pleasant Valley Loop. Also, a portion of Cottonwood Campground was resurveyed to more precisely map the boundaries of site recorded there and to identify interpretive opportunities; however, in September 2011 a flood destroyed the majority of the site. The survey of a portion of Indian Cove Campground was also conducted. A large area of Indian Cove Campground was long ago recorded as a site, apparently remotely from an office, based on very vague notes from the 1930s. The JOTR crew continued with a survey in that area to help determine accurate site boundaries. Among these were milling features that can be interpreted to the public. The draft site record for CA-SBR-2054 still needs to be finalized.

### **Inventory and Test Excavations at Hidden Valley Campground**

In 2010 a Task Agreement (TA) to conduct inventory and archeological test excavations in the Hidden Valley Campground area was put in place with Sonoma State University (SSU). As specified in the TA the park's archeology staff will assist in all aspects of the work. In FY11 a detailed Research Design was completed as was consultation with the 14 affiliated tribes. The fieldwork in an 88 acre area in and around the campground was conducted in late August 2011 to limit disruption to park visitors. A Native American monitor was involved during all of the fieldwork. After initial review of the GIS information gathered during the field project, twelve archeological sites boundaries have been identified, including previously known sites (some of which have now been merged into single site boundaries) and three newly documented sites.

Intended outcomes of this project will include a final archeological report detailing this newly acquired information, new and revised site records, analyzed and cataloged artifacts available for display, and a district determination of eligibility to the National Register of Historic Places. SSU will continue analyzing field data and writing up reports in FY12 and FY13. This detailed information will aid in making a variety of critical management decisions concerning the campground, foremost of which will be interpretive/educational. This project will be followed with a separate PMIS facilities project for the creation and installation of interpretive waysides in the campground.

### **Inventory and test excavations at Barker Dam Loop Trail**

In 2010, a TA to conduct inventory and archeological test excavations in the Barker Dam Loop Trail area was put in place with SSU. As specified in the TA the park's archeology staff will assist in all aspects of the work. A detailed Research Design was completed in FY11, as was consultation with the 14 affiliated tribes. It is expected that the field portion of the project will occur in winter of 2012. Intended outcomes of this project will include a final archeological report detailing this newly acquired information, new and revised site records, analyzed and cataloged artifacts available for display, and a district determination of eligibility to the National Register of Historic Places. This detailed information will aid in making a variety of critical management decisions concerning the trail, foremost of which will be interpretive/educational. This project will be followed with a separate PMIS project for the creation and installation of interpretive waysides along the trail and possibly a brochure.

**Database entry**

During FY11, the park's archeological GIS information was updated to reflect more accurate information, correct inconsistencies in data, and digitize previously reported archeological isolates that had not yet been processed in GIS. The park's archeological site point data was fairly accurate; however, polygon data showing actual site boundaries was not accurately reflected on GIS and had either not been plotted or in some case did not line up with point data. A Student Conservation Association archeological technician intern assisted the park's archeological staff with these crucial updates. Using archeological site records, topographic maps, and aerial imagery over 270 site boundaries were added, updated, or corrected for better accuracy. The park's miscellaneous isolate file cabinet was also re-organized and when applicable processed in GIS. In addition, one new site record was added to the park's ASMIS database and 58 site records were updated.

**Contracted rock art conservation work**

In FY11, a project was funded to conduct conservation work on rock art. This work was contracted to Harris Environmental Group with conservator Dr. Constance Silver to conduct the project. There are seven sites that are the focus of this work. Damage includes climbing chalk, charcoal, paint, and other unknown substances. Consultation with the California State Historic Preservation Officer and the 14 affiliated tribes was conducted by park staff. Work will begin in FY12 and will consist of an initial visit by the conservator, subsequent laboratory work, and a return visit to conduct the actual conservation. Another component of this contract consists of training interested NPS staff and local tribes so they can properly remove chalk and charcoal from non-archeological areas.

**Bouldering project**

In October of 2010, Archeological Technician Caitlyn Marrs represented Joshua Tree National Park at the National Climbing Management Summit held in Las Vegas by the Access Fund. At the summit Marrs gave a presentation entitled "Cultural Resources in Joshua Tree National Park & Climbing Management". The presentation touched on the current challenges faced at the park, especially as they pertain to cultural resources and balancing protection with recreational climbing. The presentation also summed up initial field results of the ongoing bouldering project.

Progress on the bouldering project was stalled in FY11 due to unforeseen circumstances, delaying the completion of the final report and map book until FY12. However, in FY11 one new archeological site was recorded for the Bouldering Project, three bouldering areas were proposed for permanent closure due to impacts to sensitive cultural resources, and the new climbing/bouldering brochure was reviewed for final edits. Work will be completed in FY13.

**Outreach**

Several outreach efforts were initiated by cultural resource staff. A cultural resource awareness flyer was created and disseminated to Desert Institute and the park's Commercial Use Authorization permitting office. The intent of this flyer is to provide an outreach document to park staff, partners, instructors, volunteers, and commercial user guides on possible visitor-caused impacts to archeological resources – how to prevent damage, better protect/preserve,

proper archeological site etiquette, and reporting cultural resources and archeological site damage.

Also in an effort to provide park staff and visitors with more educational material for cultural resources a draft brochure was created. The brochure highlights the “dos” and “don’ts” when visiting archeological sites, understanding why these sites are important, how to properly report cultural resources found in the park, and provides additional resources on learning more and getting involved. The brochure draft has been completed but has not yet been approved outside the cultural resources branch.

A newsletter was also written to inform park staff about some of the activities being conducted by cultural resources branch.

### **Created a Site Treatment Guide for Cultural Resources reporting site damage to Law Enforcement.**

Increased site monitoring by cultural resources staff and volunteers, and greater cultural resources awareness of general park staff, has increased the number of reports of damage and threats to the park’s cultural resources. In cooperation with the protection division, a draft for a guide to treatment procedures was developed. This has improved and standardized the treatment methods of certain types of damage to cultural resources and streamlined the reporting procedures to the protection division. The draft treatment guide should be finalized prior to the end of FY12.

### **Volunteer program**

At the beginning of FY11 the park’s archeology staff in, cooperation with the park’s volunteer coordinator, worked to build a professional team of available archeological volunteers. In January 2011 the park hosted for the first time, a California Archeology Site Stewardship Program (CASSP) volunteer training, organized by the cultural resources branch in cooperation with other park divisions. Pacific West Regional Director, Christine Lehnertz, addressed the 20 students, CASSP instructors, and park staff concerning their efforts to encourage volunteer training for the protection of the park’s cultural resources, and thanked those who volunteer their time and effort to the park.

As a result of the training, Joshua Tree National Park now includes 18 volunteers, up from seven prior to the training. The various volunteers assist the cultural resources branch with front and backcountry site monitoring, field surveys, site treatments, site recording, condition assessments, training, oral history, and the library. Several volunteers have specialized cultural resource skills and abilities and assist other divisions with projects and tasks. Many of these volunteers are active year-round, and all have made significant contributions to site protection, the park’s archeological inventory, and oral history transcription. Cultural resources branch volunteers have contributed well over 1000+ hours to the park in FY11 alone.

### **Cultural Landscapes**

In FY11 the park received a signed and final copy of the Northern Piñon Mining District Level II Cultural Landscape Inventory (CLI). The Desert Queen Mine, Eagle Cliff (Black Eagle) Mine, Louise Mine, and the Wall Street Mill are located within the 3,767 acre district. Also located in

this district, are a road system and number of wells. Significant at the local level, the Northern Piñon Mining District was determined eligible for the National Register of Historic Places under Criterion A for its association with events that have contributed to the broad patterns of American history. The period of significance for the district begins in 1894 when mining operations began at the Desert Queen Mine and continued until 1942 when Limitation Order L-208 was implemented, which banned gold mining as the nation entered World War II. As a result of the Northern Piñon Mining District Cultural Landscape Inventory an additional 20 structures will be added to the List of Classified Structures database.

The Ryan Ranch cultural landscape study was conducted in FY11. It was decided by the region CLI team that the ranch landscape should actually be part of the Lost Horse cultural landscape, which was begun in FY10. The draft for the Lost Horse Mining Historic District Level II Cultural Landscapes Inventory is expected to be completed in early 2012.

### **Environmental compliance**

In FY11, cultural resources facilitated compliance on all submitted projects and research permits. This involved the review and completion of over 26 park projects for National Historic Preservation Act (NHPA) compliance, and the review of 35 research permits.

The cultural resources branch also created two documents to both de-mystify and help facilitate cultural compliance for park project managers. The two documents pertained specifically to complying with section 106 of the NHPA (Checklist for Cultural Compliance, and Compliance Flow Chart for Projects with Ground Disturbance). Wanda Raschkow and Caitlyn Marrs also conducted section 106 training for the park's resources division where both of these documents were presented.

Additionally the cultural resources staff responded to the mid-September 2011 Cottonwood flood to assess resource damage and assist with initial response and emergency compliance efforts.

### **Historic Structures**

#### **Mastodon Mine Stabilization**

The Mastodon Mine ore bin stabilization project was established through the Colorado Plateau/Cooperative Ecosystems Studies Unit under a TA with the heritage conservation branch of the Drachman Institute at the University of Arizona in FY10. In FY11, a documentation and assessment trip was performed by the cooperative project team. As a result of this trip, and a trip from the previous fiscal year, two reports were filed in FY11 by the cooperator: "Documentation and Stabilization of Mastodon Mine Structures: Background Report and Preliminary Analysis," and "Documentation and Stabilization of Mastodon Mine Structures: Stabilization Plan." The stabilization work is planned for early FY12.

#### **Completed planning and reconstruction of McHaney Cabin at Keys Ranch**

In FY09, a generous donation was made to the Joshua Tree National Park Association by the Parfet family for reconstruction of the Keys Ranch McHaney Cabin. This donation was to honor a member of the family who had a deep appreciation for Keys Ranch. A long process began to develop plans for the reconstruction of the cabin and to conduct necessary compliance. In FY11 the actual reconstruction was finally completed. The park cultural resources staff and staff from

the Western Center for Historic Preservation (WCHP) headquartered in Grand Teton National Park worked together on the project. The final Project Proposal and Safety Plan were submitted by the WCHP in FY11 and work was completed during four weeks in April and May 2011. WCHP staff was assisted in the field by not only cultural resources staff and volunteers but also members of the park's interpretive and resources divisions. The historic roof, flooring, and some hardware were reused in the final structure.



Keys Ranch- McHaney's house (E):2000 file:05587-3



### **Completed repair of retaining wall at Keys Ranch after flood event**

A series of major rain events caused flash flooding that undermined a portion of stacked stone retaining wall at Key's Ranch near the main house and orchard. In house, cultural resource staff and volunteers performed an emergency stabilization that prevented an imminent collapse. Later, with assistance from the WCHP specialists, in house staff and volunteers performed a ground-up reconstruction of the affected portions of the wall and drainage bank in tandem with the McHaney Cabin restoration. The wall has successfully withstood subsequent rain events with no signs of additional damage. The wall is being monitored by cultural resources volunteers and staff.

### **Exhibit Specialist for historic structures preservation**

The park's first exhibit specialist position specifically for historic structures preservation was classified and announced in FY11. The position was filled by Morgan Baird late in the fiscal year. This is a permanent base-funded position and will greatly enhance the oversight of this cultural resources program. The responsibility for cultural landscapes will also transition over to the exhibit specialist.

### **Section 106 Compliance**

#### **Mine recording compliance completed**

Archeological site records were finalized and an accomplishment report was written for 22 mines that were recorded in FY10. These mines were scheduled to have unsafe openings closed by a bat gate, cupola, or polyurethane foam. Work was accomplished under a Programmatic Agreement (PA) between the National Park Service and the California State Historic Preservation Officer (SHPO) regarding mitigation of physical safety hazards within National Parks in California. Before closures could be done the area of potential effect had to be determined, which meant that the sites needed to first be recorded and mapped. The report is being tracked and sums up the work completed the year before as well as documenting the conditions of the sites after they were sealed. Results of the archeological work were sent to SHPO as required annually by the PA. In FY11 archeological compliance was completed at one opening that was subsequently closed at the Anaconda Mine; the report and SHPO letter are pending.

#### **Mill sites recorded prior to sampling efforts**

This year 14 historic mill sites were reviewed under section 106 of the National Historic Preservation Act (NHPA) for Environmental Cost Management, Inc. to collect hazardous material samples at these locations as a part of CERCLA. The review revealed that nine out of the 14 mill sites warranted additional field documentation prior to sampling. There were four mill sites recorded for the first time during this project; two sites re-recorded with substantial boundary changes; and three sites had continuation forms produced with updated feature descriptions, sketch maps, and photographs. Six of these nine historic mill sites also contained prehistoric components. Pre-field research began on June 6, 2011. A consultation letter was sent to SHPO on September 8, 2011 and a letter was sent to the 14 affiliated tribes on September 2, 2011. There had been 1280 person hours put into this project by cultural resources staff at the end of FY11.

Additional work will be required in FY12 to complete this project. The draft site records need to be finalized and site record information entered into the ASMIS, ArcGIS, and LCS databases. Six of the 14 sites proposed for testing have prehistoric components and will also require an archeological site monitor. A final report still needs to be written for the project as a whole.

## **History and Ethnography**

### **Oral History and Ethnography**

Sixty-three sets of oral history interviews conducted in the 1970s on topics covering the early human history from the early 1900s, were professionally converted from the original reel-to-reel and cassette formats to CDs with electronic backups. Transcription of those interviews, which had not been previously processed, was started by the historian and a dedicated program volunteer.

An updated finding aid for the collection was drafted.

Working with local area ethnographic experts, the park historian/ethnographer began the literature review and ethnographic field visits for two Traditional Cultural Property studies. Fourteen new interviews were conducted for the Oasis of Mara and the Queen Mountain Traditional Cultural Properties, as well as the oral history project.

### **Park Administrative History**

The multi-year Administrative History of the park was converted from a Volunteer-in-Parks project to a Task Agreement, under a Cooperative Agreement with the University of South Alabama. Under the agreement, additional research was conducted in regional archives and a draft of the report was begun.

### **Historic Furnishings Report**

Work on the Keys Ranch Historic Furnishings Report, funded thru the FLERA program, moved into review and final editing. The project, conducted by a contractor through Harpers Ferry Center, is expected to be completed by spring of 2012.

### **Museum Collections**

The ongoing management and cataloging of both backlog and new natural history and cultural objects continued at Joshua Tree National Park with 5,000+ objects added to the park museum collections. Seventy-eight research requests were processed ranging from quick information requests or general tours of the storage facility to multi-day scientific studies.

The park museum curator continued to assist Mojave National Preserve as curator of record.

## **RESOURCES TEAM NATURAL**

### **Citizen Science Program and Research Coordination Research Coordination**

Joshua Tree National Park, in partnership with the JTNP Association, announced winners of the 2011 Robert Lee Graduate Student Research Grant Program. Each of the four grant awardees were outstanding in demonstrating how their research can be applied to land management issues as well as increase our understanding of park resources and their conditions. The funded research topics include: studying techniques to restore post-fire burned lands, examining effects of air pollution on plants, seed production, insect survival, and desert ecosystems, understanding interactions between settlers and tribal communities during 1850-1960, and exploring perceptions that recreational visitors have of resources impacts in the Park. Over the next two years, each of the awardees will be working collaborating with both resources and interpretive staff while implementing their research studies in the Park.

Since 1991, there have over 300 research permits issued representing 177 separate research studies conducted within Joshua Tree National Park. Overall, the research permit topics include: 47% vegetation communities and their ecology, 30% wildlife, 18% geology, 4% cultural and historical, and 1% other. This FY2011, there were 34 research permits issued that will provide important scientific information for the Park such as climate change effects, effectiveness of desert restoration techniques, golden eagle surveys, biological species inventories in riparian habitats, flora and lichen inventories, desert tortoises population and abundance, geological mapping, paleontology investigations, and many others.

### **Citizen Science Program Coordination**

This FY2011, the Citizen Science Program coordinated and participated in 20 science-based volunteer projects associated with natural resources, resulting in over 3000 hours of work by about 400 citizen volunteers. The number of visitors contacted, citizen science and resource services projects conducted, total number of volunteer work hours performed in the Park, and quality of visitor experience, understanding, and involved in resources preservation and stewardship activities has continually increased since inception of the Citizen Science Program.

Projects include social trails restoration, invasive species mapping, weed pulling, native plant revegetation/ restoration, plant growth monitoring projects, boundary closure projects (w/ Ranger LE), biodiversity inventory projects, seed collection and propagation studies, joshua tree demography measurements, phenology data collection, and climate change data collection. Most citizen volunteers are members of the local community, park visitors including recreational climbers & hikers, local advocacy groups, Marine Corps, university groups (students on spring break), and Coachella/Morongo high school students. Through the Citizen Science Program, our collaborations/partnerships with university researchers who conduct research in the Park is increasing; we recruit them to they help us in designing scientific studies, developing monitoring protocols, working with our citizen science volunteers, and identifying resource management concerns and to implement recommended mitigations in the field.

One of the highlights of the Citizen Science Program was the first Biodiversity Hunt held on April 29-30, 2011, in the Oasis of Mara. Beginning at 10:00am on Fri, 4/29, more than 30 taxa specialists from a variety of research institutions and agencies (e.g. Rancho Santa Ana Botanic Garden, UC Riverside Entomology, ESRI Conservation GIS, Cal Academy of Sciences, LA County Museum, Riverside-Smithsonian Museum), amateur naturalists from the local community, and park staff (from resources and interpretation) rallied together for 30 hours to attempt to inventory all the species that live in the 58 acres of the Oasis of Mara. As part scientific discovery, part educational outreach, and part celebration of biodiversity, it was a very successful public event!

The total # species inventoried at the Oasis of Mara was 674 species (subdivided by taxa grps below). Of the vertebrates that were surveyed, taxa specialists observed 33 individual bird species, 10 herp species, and 11 different mammal species. Of the wild plants surveyed, botanists identified 74 separate plant species including two uncommon cacti and an additional occurrence of the rare plant, *Wislizenia refracta*. Entomologists collected and identified 546 different invertebrate species (81% of total species found) which will contribute about the least studied taxa groups in the Park. Of the invertebrate species found, there are 206 bee/wasp/ant (Hymenoptera), 109 true flies (Diptera), 65 true bugs (Hemiptera), 50 beetles (Coleoptera), 67 moths/butterflies (Lepidoptera), 21 spiders (Araneae), and many other groups.

### **NEPA Compliance**

Reviewed resources impacts and issued NEPA CEs for >30 Park projects this fiscal year (coordinated w/ project leaders, IDT members, & cultural staff, facilitate compliance meetings, PEPC database, issue/organize NEPA docs and administrative record).

### **Physical Sciences**

#### **Abandoned Mine Land Program (AML)**

- The physical science branch brought in 1.1 million dollars in ARRA funding to close 41 abandoned mine in the park. During 2011, oversight for the contracted portion of the AML closures was provided by physical science staff.
- Under the ARRA program, physical science branch contracted bat surveys for 10 abandoned mine sites. Work was scheduled and surveys were coordinated with the wildlife branch.
- Physical science branch in coordination with the wildlife and cultural branches closed the Anaconda Mine. The previous closure technique was considered inadequate for visitor safety and was responsible for the death of two raptors.
- Physical science branch, Dr. Robert Bryson AML ARRA Coordinator, (MOJA) and the State of California have entered into an agreement to inventory and ground truth the abandoned mine inventory at Joshua Tree National Park.
- Physical Science branch and the State of California Abandoned Mine Land Unit have negotiated a partnership to continue support for mine closures. In previous years the State of California has paid for 50% of mine closures in Joshua Tree National Park.

#### **Alternative Energy Development**

- Branch Chief, Luke Sabala was one of the contributing team members providing comments attending meetings and public scoping sessions for the environmental

documents relating to Desert Sunlight/First Solar, Solar PEIS, Desert Harvest and the Eagle Mountain Hydro-pumped Storage facility

- Luke Sabala developed cost reimbursement estimates and is the agreements technical representative for the monitoring/mitigation during construction of Desert Sunlight/First Solar site
- The physical science operation collected baseline data for soundscape and night-sky imagery that will be used as a monitoring basis during construction of the desert Sunlight/First Solar project.

### **Air Quality**

- Continuous monitoring at Black Rock air station with minimal down time.
- Upgraded the Black Rock site to include the NADP/Ammonia Monitoring Network.
- Passes California Air Resource Board audit/station challenge.
- Continuous monitoring at Cottonwood air station with minimal down time.
- Upgraded Cottonwood air monitoring with a DustTrack PM 10.
- Continuous (full year) monitoring at the Pinto Wells in anticipation for the proposed alternative energy and landfill projects.
- Negotiated support/funding with the Inventory and Monitoring Program to continue operations at the Cottonwood air station.
- Negotiated with NOAA, a location in the park for a climate change monitoring station near the Blackrock air station. The station will be part of a network of stations funded by NOAA and serviced by the NPS staff for long-term monitoring climate change.
- Ozonesond study conducted by NOAA and park staff in 2010, was published in the *Journal of Geophysical Research - Atmospheres*.

### **Geologic/Groundwater Research**

- Even in the absence of funding, the physical science branch collected potentiometric surface in all the known wells in the park.
- Luke Sabala attended two USGS meetings associated with groundwater basins around the park. The information provided by the USGS is vital for supporting park comments relating to future developments around the park
- Luke Sabala will be presenting his research relating to tectonic uplift of the Little San Bernardino (Long Canyon) in Joshua Tree National Park at the American Geophysical Union Annual Meeting in December 2011.

### **Night Sky Program**

- Luke Sabala is an active member of the Morongo Basin Dark Skies Alliance representing the park's issues with light pollution. Working directly with San Bernardino County Supervisor Neil Derry's representative Alan Rasmussen, representatives from the Marine Corps Air Ground Combat Center, and other entities to enforce county ordinance and educate the public regarding light pollution.
- Physical science technician, Stacy Manson presented an overview of night sky issues to the general public at the Perseid Meteor Event hosted by Mojave Desert Land Trust.

### **Soundscape Program**

- The physical science branch hosted a training session for the development of the Natural Soundscape Program at Joshua Tree National Park.

- The soundscape program continues to develop baseline data that will be used to assess natural ambient sound violations resulting from external development adjacent the park boundary.

### **Support for Other Divisions/Groups**

- Luke Sabala provides support to the Desert Institute by hosting a field trip for group of satellite imagery specialists in March of 2011. The group of image specialists ground truthed images seen from space and used the information to help DOD and other government agencies identify surface features as seen from space. The two specific destinations of interest to the group were abandoned mines and springs.
- Luke Sabala presented research relating to the tectonic uplift of the little San Bernardino Mountains at Joshua Tree National Park to 35 of USGS geophysicists.

### **Resource Advisor Activities**

The Resource Advisor (READ) team now has eight members. The Team meets on a regular basis year-round discuss issues, topics, and information that would be needed in the case of wildfire or major emergency incident. Although there were no fire incidents this year, the READs were ready throughout the entire fire season.

JOTR is committed to developing a successful and proactive READ program. Over the past few years, guidance documents on park resource and safety concerns have been disseminated to fire crews working on incidents in the park. Team members continue to refine these documents as both the National and JOTR READ programs evolve and grow.

The READ team conducted their first internal training for new recruits and to refresh existing members. Presentations given by National READ trainers were modified and adapted by JOTR READs to address concerns, issues and topics in JOTR and the desert region. The Team is also conducting field trainings around a variety of resource concerns to share knowledge and experience and to increase team cohesion across disciplines.

READs are also responding to incidents that may require natural and cultural mitigation and assessment. READ member Caitlyn Marrs responded to assess resource damage as a result of the September 2011 Cottonwood flood. She noted significant cultural resource damage as well as directed clean-up crews & rehabilitation efforts using best mitigation practices concerning natural and cultural issues.

### **Vegetation Branch Activities**

#### **Vegetation Management – Basic Operational Overview**

The vegetation branch of Joshua Tree National Park is divided into five program areas each of which contributes to the overall mission and management of the Park. The vegetation branch programs include: restoration, climbing and bouldering, native plant nursery operations, invasive species, and rare plant/botany. Together these programs have been called the Center for Arid Lands Restoration. These programs are highly integrated and function together to produce lasting meaningful results.

- The Vegetation Branch with other members of the Desert Managers Group organized a Restoration Workshop in Barstow, California on July 13 and 14, 2011
- Joshua Tree National Park hosted the California Phenology Training from March 30 to April 02, 2011.

### **Center for Arid Lands Restoration**

- Total volunteer hours: 707.25, a value of \$16,564\*
- Total number of plants propagated: 10,113

#### **Seed collection**

- Made 12 seed collection trips from the end of April to the end of July
- Collected from 23 species of shrubs and grasses in 12 different locations

#### **Facilities**

- Demolition of old, unsafe greenhouse and installation of new greenhouse; January to March
- New shade cloth installed over upper compound
- Additional drip lines were installed in the upper compound
- Replaced battery-operated timer that controls drip line solenoid valves with solar-powered system

#### **Restoration Program**

- 1056 plants outplanted throughout the park
- 715 volunteer hours logged, value of \$16,752\*

#### **Restoration in Burned Areas**

- Lost Horse Mine Fire 2009 (Burned Area Restoration)
  - Revegetation with 192 native plants
  - Maintenance and monitoring of restored sites every two months with restoration staff and volunteer groups
  - Restoration effectiveness monitoring implemented in spring 2011
  - 60 acres monitored for new introductions of invasive plant species
- Keys View Incident Fire 2010 (Burned Area Restoration)
  - Seed collecting in fall 2010 and summer 2011
  - 1017 plants propagated for this project during spring 2011
  - Herbicide treatment study: 60 acres monitored for new introductions of invasive plant species
- West Complex Fire 2006 (Burned Area Restoration)
  - Monitoring and watering every two months
  - Plant cages removed in all sites in November 2011
- Central Complex Fire 2006 (Burned Area Restoration)
  - Monitoring and watering every two months
  - Cages removed in 75% of the plants

#### **Campgrounds Enhancement Project**

- 1256 plants were propagated for this project
- 78 plants were outplanted in Belle Campground
- During the National Public Lands Day on September 19, 2011, volunteers and vegetation crew members planted approximately 60 plants in Ryan Campground
- 310 more plants were outplanted in Ryan Campground from September 26<sup>th</sup>, through September 29<sup>th</sup>, 2011.

### **Cultural sites rehabilitation**

- Maintenance and monitoring continued in restoration sites at Squaw Tank Campground, Indian Cove Picnic Area, Barker Dam area and Crystal Cave.

### **Route 12 Pull outs restoration with native plants and vertical mulch**

- 213 plants were outplanted at ten non-designated pull-outs
- Vertical mulch planted at four non-designated pull-outs

### **Social Trails**

- Vegetation crew members and 48 volunteers outplanted 152 plants in the Real Hidden Valley Nature Trailhead during the Real Hidden Valley and Houser Buttress Nestle Waters Event
- 51 plants were outplanted in Echo Cove during the annual Climb Smart Event
- Continued maintenance and monitoring in the social trails rehabilitation sites at the Hidden Valley trailhead and the following climbing routes: Echo Cove and Left Hand of Darkness

### **Oasis of Mara**

- In March 2011; 20 volunteers (250 hours), 3 SCA interns ( 91 hours) and 4 park staff (85 hours) worked a total of 402 man-hours to remove more than 150 cubic yards of palm frond waste and other wooden debris around the nature trail in the Oasis of Mara

### **Invasive Plant Program**

- 2,900 acres surveyed throughout the park
- 452 volunteer hours logged, value of \$10,585\*

#### **Sahara mustard (*Brassica tournefortii*)**

- 150 acres treated in Pinto Basin and Pleasant Valley

#### **Shortpod mustard (*Hirschfeldia incana*)**

- 6 acres treated at Black Rock Campground

#### **Fountain Grass (*Pennisetum setaceum*)**

- 3.1 acres treated along northern boundary (Fortynine Palms oasis and other canyons)

#### **Tamarisk (*Tamarix spp.*)**

- 2.6 acres treated at park assets and springs

#### **Lost Horse Fire**

- 60 acres monitored for new introductions of invasive plant species

#### **Key's View Fire**

- 45 acres monitored for new introductions of invasive plant species
- Grass-specific herbicides applied to 6 study plots; cover of native and invasive plant species measured before and after application. Preliminary results show that at least one herbicide results in 50% reduction in cover and density of red brome with no significant decrease in cover and density of native plants

### **Botany/ Rare Plant Program**

- Over 300 volunteer hours were banked, a value of \$7,260\*
- 25 botanical surveys of under surveyed, or never-been surveyed areas of the park were completed

- Species lists from botanical surveys of past years, and all of 2011 surveys, have been digitized and are available on the share drive.
- 594 new herbarium specimens were collected and filed into the Joshua Tree National Park Herbarium.
- In anticipation of publishing a complete annotated checklist of the vascular plants of the park, the existing plant list has been thoroughly reviewed, and refined. During intense visits to the Wesley Niles Herbarium at University of Nevada Las Vegas, and Rancho Santa Ana Botanic Garden's Herbarium in Claremont, CA, over 135 specimens (collected from Joshua Tree National Park) were reviewed for accuracy and up-to-date taxonomy. As a result, about 30 species were successfully identified as being misrepresented on the park's list.
- Approx. 10 newly-documented species were recorded this year. These species were not previously reported in the park. Of these "new to the list" species, 4 are currently on the CNPS rare and sensitive species list.
- 30 undocumented occurrences of CNPS listed rare or sensitive species were discovered, recorded, and added to the park's "All Rare Shapefile".
- All known populations of the park's two federally protected plant species, *Erigeron parishii* and *Astragalus tricarinatus*, were revisited to collect leaf matter and seed. The leaf material will be used in a population-based genetic analysis, and the seed was sent to Ranch Santa Ana Botanic Gardens for germination studies and preservation. The information gained will be utilized for the development of species' status reports for both plants, in FY2012.
- Another large population of the federally endangered, *Astragalus tricarinatus* was discovered, which may turn out to be the largest documented occurrence to date
- Photos for over half of the entries on the species list have been compiled, organized, and are being reviewed, for use in the annotated checklist website to be added to the park's main web site later this year.
- Kerry Knudsen has added 120 species of lichen and lichenicolous fungi to our park's species list. He has made over 1,000 collections throughout the park which include 4 species new to California, 1 species new to North America, and 5 possibly new to science. Joshua Tree will likely be the most well documented National Park for lichen diversity once these findings are published.
- 26 high school students across 5 districts learned about, observed, and recorded data on lichen abundance and diversity at Black Rock Campground.
- The Vegetation Classification shapefile for Joshua Tree National Park was completed and is available through the park's GIS drive. The final report is expected in 2012.
- A new Botany sharepoint site has been developed and can be accessed at <http://inppwrosharept:36961/PWR/JOTR/resources/veg/botany/default.aspx>
- Development and implementation of the California Phenology Project pilot sites throughout the park have yielded successful results and much feedback for the statewide University of California Natural Reserve System.

### **Climbers Coffee and Social Trails**

- 564 volunteer hours logged, value of \$13,209\*
- 4560 Cups of Coffee / Visitor Contacts

### **Social Trail Related Volunteer Projects at Climbing Routes**

- Real Hidden Valley and Houser Buttress Nestle Waters Event  
152 plants outplanted and approximately 150 volunteer hours logged
- Echo Cove/Climb Smart Event  
51 plants outplanted and approximately 80 volunteer hours logged
- Dihedral Rock/partnership with Friends of Joshua Tree  
18 volunteer hours logged

### **Update on 2010 Projects**

- Climbing Routes Left Hand of Darkness and Echo Cove: watering continues as scheduled (restored March 2010)

### **Proposed Social Trail Restoration Projects**

- Climbing Route Old Road – NEPA Compliance, 200 plants growing in Center for Arid Lands Restoration
- Climbing Route Peewee Rock – NEPA Compliance, 50 plants growing in Center for Arid Lands Restoration

### **Special Events**

- Outdoor Outreach ([www.outdooroutreach.org](http://www.outdooroutreach.org)): A large guided group's climbing weekend was rained out, and this evolved into a training event. Approximately 30 participants
- Contra Costa Search And Rescue (SAR): Six members of the Contra Costa SAR team came to JOTR for desert survival training. 6 Participants
- Climb Smart: 30 volunteers, 120 hours
- Prescott College: Students from Prescott College asked for a presentation about, "How to be a Climbing Ranger" and other opportunities for jobs in the Park Service
- Graffiti Removal\_(1/16/2011): Approximately 15 volunteers from the American Alpine Club, helped to scrub graffiti off of the Patagonia Pile near Hidden Valley Campground. They logged over 76 volunteer hours
- REI Event: 40 REI employees conjugated in JOTR for a 'Learn How to Climb' weekend, 40 participants
- Threshold Climbing Gym ([www.climbth.com](http://www.climbth.com))
- Chalk Cleanup: 40 volunteers, 120 volunteer hours
- Junior Ranger Day (4/23/2011): About 20 youth came out and learned about gear, knots, and safety while climbing. The Climbers Coffee posters were displayed and about 10 adult climbers wandered over from the crag to read them, ask questions, and drink coffee. 20 participants

### **Social Trails Inventory Project**

- The mapping of social trails around climbing and bouldering areas was completed. There are a grand total of 123.7 km of social trails near climbing areas

- A complete History of Social Trails was developed and placed into the park's intranet system.
- A GIS layer '*proposed restoration sites*' was added to the social trails map (Master\_Social\_Trail.gdb)
- Social Trails Inventory master map was updated and streamlined and now includes metadata

\*Value of volunteer time = \$23.42/hour ([http://independentsector.org/volunteer\\_time](http://independentsector.org/volunteer_time))

## **Wildlife**

### **Bats**

Park biologists worked with the Physical Science team and American Recovery and Reinvestment Act (ARRA) funded bat researchers to survey ten abandoned mine land (AML) sites where bat gates were installed this past year. Each site was surveyed in the spring, winter and spring for assessment of presence/absence pre- and post- gate installation, use (*ie.* night roost, maternity colony or hibernacula site), species and population numbers.

Wildlife staff attended US Forest Service Mine Safety course in Idaho in May. The week long course was to inform and educate people of the dangers, hazards and safety issues associated with active and abandoned mine sites.

Wildlife and Physical Science personnel worked together to remove cable netting (an outdated method of closing mine openings) from the Anaconda mine and replaced it with a bat/wildlife friendly gate. Within one month of installation, wildlife staff observed barn owls using the mine shaft. The gate allows for safer ingress and egress of wildlife as well as to make the site safer for Park visitors.

Wildlife Staff continues to work with other biologists, NPS parks, federal and state agencies on a response plan regarding bats and white-nosed syndrome (WNS). The fungus *Geomyces destructans*, which surfaced in 2006 in New York state, has decimated bat populations in the US and Canada. It is now documented in 19 states and four provinces and is spreading westward. Scientists know very little about this fungus, but have discovered that it thrives in cold temperatures. Due to this, the impact it will have on bats in the southwest is unknown.

Kristen Lalumiere, Wildlife Bio Tech, presented at the Western Section of the Wildlife Society conference in February on the history of bat surveys, evolution of AML closures and gate installations in JOTR. She also discussed the steps JOTR is taking in preparing for the arrival of WNS in the southwest.

### **California Treefrogs**

In response to declining local populations of California treefrogs (*Pseudacris cadaverina*) in the park, wildlife staff proposed to collect tadpoles from desiccating pools in Rattlesnake canyon and relocate them areas where they were historically present. Prior to the translocation, adults from the source population were tested for Chytrid fungus (*Batrachochytrium dendrobatidis*) to avoid the spread of the deadly disease to new locations. Lab results returned as negative for the presence of Chytrid, and staff reintroduced thirteen tadpoles to Smithwater canyon, where this

species was historically recorded but have been absent for some time. Staff plans to continue reintroductions to Smithwater canyon again next spring.

### **Desert Tortoise**

Wildlife staff completed the sixth year of the radio telemetry monitoring study assessing the effects of roads on desert tortoise movement and survival. There were two new additions to the study, bringing the number of transmittered tortoises to seventeen. One tortoise in the Lost Horse area moved over two miles from her normal range for the summer and returning in the fall, repeating her behavior from 2005. Analysis of data from previous years shows tortoises on low-vehicle traffic roads are crossing more frequently than those near high traffic roads, who may only cross a few times a year. Staff continues to track and monitor the tortoises to increase our understanding of these charismatic desert creatures.

Road construction pre-surveys were completed for the planned Wilson Canyon-Pinto Basin Federal Highway reconstruction project. During the surveys, two live tortoises (one adult, one juvenile), one juvenile carcass, thirteen burrows, and three bone fragments positively identified as desert tortoise were found. The one live adult tortoise was transmittered and is now a part of our radio telemetry study. Survey results were submitted in a report to the US Fish & Wildlife Service (USFWS) and their conservation recommendations are based on these findings were written into a Biological Opinion for this project.

Tortoise surveys were also completed in Black Rock campground to get an idea of potential impacts to the species with the proposed redesign. The survey resulted in finding five tortoise burrows and two pieces of tortoise scat in the proposed action area. Also noted in the report were the many past sightings reported by visitors and staff in the area.

The park funded USFWS tortoise population surveys again in 2011. The wildlife staff assisted with the effort by providing data for a detectability index calculated from tracking our transmittered tortoises.

USFWS mandated tortoise awareness trainings, provided by wildlife staff to new employees and contractors, were conducted throughout the year to ensure that everyone working in the park are aware of threats to tortoises and that no tortoises are harmed during project activities.

### **Honeybees**

Wildlife Staff developed a response plan to address safety concerns regarding Africanized Honeybees. The comprehensive plan involves recording honeybee observations and incidents into a database, delegation of responsibilities among divisions, preventative measures, assessment of honeybee aggressiveness, and various treatment methods.

### **Raptors**

Wildlife staff continued our spring surveys of breeding raptors nesting in areas on or near established climbing routes. Staff observed the breeding of red-tailed hawks and American kestrels around the climbing area called the "Towers of Uncertainty". The area was closed to the public from 10 March to 21 June to encourage undisturbed nesting. An 800 meter spatial buffer was implemented (the recommendation for red-tailed hawk) around the climbing area to ensure

adult birds would not abandon the nest due to human disturbance. The buffer also satisfied the recommendation for the kestrel. During a reconnaissance trip in June, a juvenile red-tailed hawk was seen in the area indicating successful nesting. Annual plants were found growing on the trail to the site which meant that visitors generally adhered to the closure.

### **Thrashers**

This past winter, staff began an informal survey for various sensitive thrasher species in the park. The objective was to increase sightings in our observation database and eventually have enough data to model suitable habitat for these species in the park. Surveys resulted in six Le Conte's thrashers (*Toxostoma lecontei*) and one sage thrasher (*Oreoscoptes montanus*) sighting. Due to the low number of observations for this survey, this study will have to continue into next year.

### **Biodiversity Hunt**

Wildlife staff participated in the "Bio-blitz" this year held at the Oasis of Mara. With the help of volunteers, small mammal traps were set up the night prior to the event. The next morning, staff found six different species of rodents in the traps, including a black rat (*Rattus rattus*), a species that hasn't been documented in the park previously. In addition, wildlife staff gave presentations on: tortoise telemetry (along with a demonstration), raptor surveys, and lead talks on the various reptiles, birds, and mammals found in the park.

### **Guzzlers**

Motion detection cameras continue to be used as part of an on-going wildlife study at the parks guzzlers. New cameras were installed at our more remote locations in hopes of acquiring more data on wildlife use.

### **Wildlife Observation Cards**

The backlog of cards has finally been entered, and new cards are entered as they come into the wildlife office. The total number of entries into our database is over 15,000! These records are extremely helpful in our efforts of mapping bighorn sheep sightings, reports on tortoise survey findings and also help us document the presence of rare and unique wildlife.

## **RESOURCE AND VISITOR PROTECTION TEAM**

During FY11, the division supported the 75<sup>th</sup> Anniversary activities by providing security additional EMS support and logistical support within the added activities. Four seasonal and three permanent Law Enforcement Rangers were hired in 2011. Chief Ranger Judy Bartzatt retired after eighteen years of service at Joshua Tree National Park. A sister park agreement was initiated with Ecuador's Galapagos National Park. An Employee reunion was coordinated as well. Five employees attended Fundamentals II this year and came back with a greater understanding of how the National Park Service operates.

### **Law Enforcement Activities**

Visitor and resource protection staff worked 801 misdemeanor criminal investigations and 23 felony investigation during FY2011. Five U.S. Magistrate Court sessions were hosted at the Black Rock Visitor Center; where Federal Officers from the Morongo Basin, including the Morongo Basin Air Ground Combat Center (MCB 29 Palms) presented their cases. Of

significance this year was the conviction of three male subjects for timber theft. They had cut down and removed wood from Juniper and other trees from "Section 23". Two other individuals were convicted for migratory bird treaty violations. One park employee was convicted of theft of government property. Rangers assisted the County Coroner with the collection of five modern cremation sites.

Joshua Tree National Park hosted the law enforcement refresher for the Mojave Network parks. Rangers from Death Valley and Mojave attended. The 2011 version of the Superintendent's Compendium was revised and completed.

Rangers performed ten documented backcountry patrols, which covered approximately 90 miles. Park Rangers and volunteers posted and signed approximately ten miles of park boundary, to help prevent encroachment and off-road travel. "Section 23" was barricaded with "t" posts and signed, in order to stop encroachment by Off Highway Vehicles. There had been ten years of unrestricted traffic. Locals continue to violate the closure and remove the barriers. 180 pounds of litter were removed from "Section 23" and Covington Wash in association with the closure. The mouth of 49 Palms Canyon has been closed and signed to OHV traffic, again. Division staff worked with the Resource Management division and the Mojave Desert Land Trust Volunteers to close off an illegal access road into the park that was being used for off road vehicle travel.

### **Search and Rescue Activities**

The park's Search and Rescue program continued to grow this year. A park partner, Friends of Joshua Tree was able to replace our old SAR vehicle and replace it with a Ford F350 Four Wheel Drive pickup with utility bed. With the utility bed, the SAR team will be able to stow and pack equipment in a more organized manner. The vehicle was well used this past year.

Four new staff members and 10 volunteers were trained in High Angle and Search Skills. These skills were put to good use as Staff and Volunteers responded to 24 Search and Rescue operations throughout the year. The Lost Horse District Ranger attended the annual Search and Rescue/Emergency Medical Conference that was held in Tulsa Oklahoma. Input was given to the Search and Rescue fields in the new IMARS reporting system that is scheduled for implementation in 2012.

### **Emergency Medical Response Activities**

There were 30 injury and non-injury motor vehicle accident investigations. Park EMTs responded to 45 visitor illnesses or injuries resulting in 31 visitors being taken to local hospitals. There were also four visitor fatalities. Four staff Emergency Medical Technicians attended a semiannual refresher to maintain their National Registry certification. The parks EMS coordinator initiated contact with Hi-Desert Medical Center to have EMTs attend free training at the center to gain Continuing Education hours to maintain EMT Certification. Due to employee transfers, additional CPR instructors were needed. Three members of the staff attended CPR instructor training and have been putting on classes for all park staff. Two Critical Incident Stress debriefings were provided to staff through the EAP program for incidents with which they were involved.

The park's radio coordinator worked with Sequoia Kings Canyon radio shop on the 10 year cyclic replacement of the park's repeater system. Hand held and vehicle radios will be replaced under this cyclic program in the future. A Right of Way was completed with Riverside County to install a new county radio repeater system to provide greater coverage in the park for county fire and law enforcement coverage in the park. An updated Service First Agreement was developed with the Federal Interagency Communication Center for dispatch service for the park. It will be signed in 2012.

### **Fee Collection Operations**

Fee collection had a busy year. Fees hired eight seasonal employees in addition to the 6 permanent staff. They staffed six locations throughout the park and have been assisting at the California Welcome Center in Yucca Valley on Saturdays and Sundays. Campgrounds were consistently occupied throughout the year and served 281,544 campers from January to December 2011. The Cottonwood area was closed on September 13, 2011 due to flooding. The visitor center reopened on November 1, with the campgrounds staying closed for the remainder of 2011.

Dunbar Armored Car Service was contracted for one year to pick up money from the entrance stations, visitor centers, and Indian Cove and Black Rock Campgrounds. For FY 11 \$3,029,614.21 was collected in entrance fees, pass sales, and campground sales. This revenue included sales of 12,000 Interagency Annual Passes, 6,600 Senior Passes, 5,000 Joshua Tree Annual Passes, 401 commercial vehicles (which can seat 26 or more people), 45 commercial vehicles (which can seat 16 to 25 people), 247 commercial vehicles (which can seat 7 to 15 people), 29 commercial vehicles (which can seat 1 to 6 people), and 79 commercial individual fees collected. The Park continued its agreement with the Joshua Tree National Park Association to sell Interagency Annual Passes at the Joshua Tree Visitor Center, with revenue totaling nearly \$40k for the year.

### **Special Park Uses**

Special Park Uses issued 28 film and photo permits, 34 special event permits, (weddings, military trainings, memorials, etc.) 44 road-based (transportation only) commercial use permits, and 48 commercial and recurring special use permits for rock climbing, hiking, and outdoor education.

### **Fire Management**

The fire management program at Joshua tree continued to develop in FY11. The program continued to work on resuming the interagency program. There were 7 funded NPS positions (Engine Module Leader, Fire Engine Operator, Assistant Fire Engine operator and 4 firefighters) and 5 funded BLM firefighter positions. One vacant position included the Engine Module leader. The Fire Engine Operator was filled.

Fire Operations at Black Rock had a slower than average fire season. With only two fires in the Park and both being contained less than 1.0 acre, the fire and support staff maintained a state of readiness by contributing their efforts to fires located within the larger zone of the California Desert District and throughout the state of California. The fire crew had three off park fire

assignments, and numerous assists at Mojave National Park and areas within the California Desert District of the BLM.

The BLM Palm Springs Field Office fire engine number 3636 moved back into the Black Rock Interagency Fire Center. One single resource was ordered for Yosemite on fire support.

The Fire Management Plan five year review will occur this winter, with the assistance of the Resource Division.

Mutual Aid agreements are in the process of being initiated one with San Bernardino County Fire Department and the Marine Corp Air Ground Combat Center fire department.

**Training completed:**

Annual Firefighter refresher

S-211 Power Saws

S-131/190 Basic firefighter

S-230 Single Resource Boss/Crew Boss

S-231 Single Resource /Engine Boss