

SUPERINTENDENT'S ANNUAL NARRATIVE REPORT  
CRATERS OF THE MOON NATIONAL MONUMENT  
1991

**SUMMARY:**

The preparation of a draft General Management Plan for Craters of the Moon was the highlight of 1991. For the first time in over 25 years, a comprehensive look was made of the issues and problems facing CRMO facilities, resources, and visitors. The draft plan was opened for public review in December and the final is expected in April of 1992. Superintendent Robert Scott transferred in June to San Juan Islands NHP and Jonathan Jarvis became the new CRMO Superintendent in October. Superintendent Jarvis, formerly Chief of Resource Management at North Cascades National Park, brought to CRMO a strong emphasis on Resource Management. He created a new CRMO organization, giving Resource Management a division status equal to Ranger Activities and the other divisions. CRMO operated with \$419,000 ONPS in FY91, providing a very basic level of service to the public and the resources. The CRMO Resource Management Plan was completed under the new NPS guidelines. A strengthened relationship between CRMO and the Idaho National Engineering Laboratory was consummated with the installation of CRMO seismic monitor within the INEL network and by an agreement for monitoring nitrous oxides at the Monument. Fire funding provided a Model 61 Fire Fighting truck and equipment that will provide structural and wildland fire protection for the Monument. Visitation was up from 1990 by 4.9% to 217,879, while backcountry use remained low at only 96 user nights. An internal investigation, assisted by PNRO and MORA, of the Fee Collection program took place and resulted in an employee resignation. Grazing trespass in the north end continued and an opinion was provided by the U.S. Attorney in Boise that prosecution would not be pursued until a legislative boundary adjustment was fulfilled. The interpretive staff examined the effectiveness of interpreting resource management concerns along the Devil's Orchard Trail. Temporary trail guides and waysides were produced and visitor response examined using the new Focus Group survey. A CRMO handbook was published through HFC after six years of work. Publications, maps, posters, videos, slide sets and rock samples from CRMO were gathered together, put into resource chests and then placed into over 20 school district offices within southern Idaho. Three new chapters--geology, history and activities--were produced for inclusion in the "Teacher's Guide." Maintenance began an aluminum recycling program and collected 663 lbs. which sold for \$131.25. Administration at CRMO entered the computer age with CCMail and computer capability at all Divisions. The front information desk, NHA, interpretation office area was redesigned and constructed to provide a separate office for each NHA and an interpreter. For the first time, the cooperating association was able to fill the Business Manager position on a year-round basis. Gross sales for the NHA exceeded \$140,000, a growth of 66% since 1987. All around it was another good year for CRMO.

**GENERAL ADMINISTRATION:**

Administration came into the computer age with most functions now being completed on computers. Communication problems continue because telephone lines are outdated. To upgrade to a digital system with greater capabilities it would cost approximately \$70,000. The phone company has the park on their list for upgrade in the next 2-3 years.

CRMO is currently using CCMail for all electronic mail and is scheduled go online with FTS 2000 in 1992.

Budget: CRMO operated with \$419,000 ONPS in FY91. Assistance from the

Craters of the Moon Natural History Association, lapse of the Superintendent position, and funding from NPS special project accounts allowed the Monument to provide a very basic level of service to the public and resources.

Personnel:

|                                                                                                                                |                    |                                      |
|--------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------------|
| Superintendent (GS-025-11)                                                                                                     | Jan-May            | Robert Scott                         |
| (Transferred to San Juan Island National Historic Site)                                                                        |                    |                                      |
| Superintendent (GS-025-12)                                                                                                     | Sept-Dec           | Jonathan Jarvis                      |
| (Transferred from North Cascades National Park)                                                                                |                    |                                      |
| ADMN Support Asst. (GS-303-7)                                                                                                  | Jan-March          | M. Eileen Layman                     |
| (Retired 11/30/90 - Temporary Appt. 12/02/90 - 03/23/91)                                                                       |                    |                                      |
| ADMN Support Asst. (GS-303-06)                                                                                                 | March-Dec          | Betty Runnels                        |
| (Transferred from Coulee Dam National Recreation Area)                                                                         |                    |                                      |
| Clerk-Typist (GS-322-04)                                                                                                       | Jan-Dec            | Beverly Farmer                       |
| Maint. Foreman (WS-4749-06)                                                                                                    | Jan-Dec            | Kent Campbell                        |
| Maint. Worker (WG-4749-08)                                                                                                     | Jan-Dec            | Doug Cap                             |
| Chief Interp. (GS-025-09)                                                                                                      | Jan-Dec            | Dave Clark                           |
| Prk Rngr (Interp) (GS-025-05)                                                                                                  | Jan-May            | Lora Hall                            |
| (Transferred to White Sands National Monument)                                                                                 |                    |                                      |
| Prk Rngr (Interp) (GS-025-05)                                                                                                  | Sept-Dec           | Lee Taylor-Edmonston                 |
| (Converted from a seasonal to Career Conditional - Reinstatement Eligibility)                                                  |                    |                                      |
| Resource Mgmt. Specialist                                                                                                      | Jan-Dec            | Shelley Sparhawk                     |
| (GS-025-7, conversion/promotion to GS-401-9 in June. Sparhawk completed the Resource Management Trainee program in September.) |                    |                                      |
| Chief Ranger (GS-025-9)                                                                                                        | Jan-Dec            | Bruce Edmonston                      |
| RMVP Intern program                                                                                                            | Apr-Jul            | Jim Steed, Michigan State University |
| Seasonals: RMVP - 5                                                                                                            | Interpretation - 3 | Laborers - 3                         |

Miscellaneous Personnel Actions (Permanent) - 13

TRAINING: Eight permanent employees attended 27 training courses.  
One seasonal employee attended 1 training course.

PROCUREMENT:

|                    |                                                             |
|--------------------|-------------------------------------------------------------|
| Purchase Orders    | - 78                                                        |
| Third Party Drafts | - 96                                                        |
| Imprest Purchases  | - 160                                                       |
| Major Purchases:   |                                                             |
| Savin Corp.        | Savin Copier 9250 - \$4794                                  |
| GTSI               | Replace equipment lost in major power surge (9/12) - \$1945 |
| LR Lumber          | Rehab Quarters #19 - \$9647                                 |
| Western Wholesale  |                                                             |

Skidmore Millwork  
Diers

GS Images                      Replace Waysides                      - \$2971  
(through Harpers Ferry)

Anchor Indust.              VIP Campground Tent                      - \$1956

Wajax Pacific              Fire Hose                      - \$1685

Miracle Rec. Co.      Paint/Amphitheater Seats- \$2056

Three computers were purchased via  
a Regional Purchase Order.                      - \$6654  
(Two with park's funds and one with region's funds)

#### RESOURCE MANAGEMENT:

Hazardous Materials: Two drums of routinely generated waste were disposed. A drum storage unit and drum lifter were purchased.

Inventory/Monitoring: Flora portion of Phase I completed. Eight new vegetation monitoring transects were established.

Wildlife: Mule deer census population est. at 671 animals, no statistically significant change from 1990.

Resource Mgmt. Plan: The new revision of the RMP in the new format was submitted for PNRO approval in December.

Abandoned Mine Lands: An inventory of AML's was completed and submitted to NPS Mining and Minerals Branch. Spoil piles at Martin Mine were tested and found to have high levels of 7 elements.

Air Quality: Several meetings held with DOE, NPS-AQ and Idaho Air Quality Bureau; interagency agreement drafted; equipment purchases by DOE begun for joint gaseous monitoring site.

Fire: Regional Office review of the Split Butte Fire (1990) was held in March.

|             |                                                                                                                                                               |
|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CRMO fires  | 0 (Phantom fire, never confirmed)                                                                                                                             |
| Interagency | Assist to BLM on Blizzard Mtn fire (initial attack, 10 ac); assist to State Police for hay truck fire on Hwy 20/26.                                           |
| Equipment   | Model 61 engine arrived in May; region provided \$4000 for out-fitting, RMVP added another \$2000. Engine was operational in July; responded to 2 fire calls. |
| Personnel   | No interagency call-outs.                                                                                                                                     |
| Training    | Edmonston - S-390, Intermediate Fire Behavior; Emergency Ops IC (NASAR)                                                                                       |

Compliance: Three EA's and six XXX forms were submitted.

Herbarium: Jennifer Whipple, taxonomist from YELL, worked for two weeks on herbarium. She corrected identifications, labels, filing, and created a new vegetation species list.

YCC Program: Youth Conservation Corps program, 4 local hires aged 15-18 years old, 8 week program (7 weeks RMVP, 1 week Maint), completed trail

rehab, north boundary, and removed 2 tons of fence and posts from spring area. See YCC report for details.

#### RESEARCH:

Monitoring: Conducted or on-going - Lichen/Air Quality, 2 Carey Kipuka Vegetation Studies, Radionuclide monitoring, Pollination Biology of Dwarf-Monkey Flower, Radionuclide Monitoring in Vegetation/Snowfall.

Seismic Monitoring: Installation of a seismic monitor in the North End was initiated by EG&G (under DOE contract), although site was not operational during 1991.

CRMO Visiting Researchers: Dr. Norm Bowers, U of I archeologist, July, Devils Orchard and Cpgd to N. Crater Trail evaluation. Steve Gibbons, April and Sept. Ken Stolte, July, recommendations for biomonitoring project statements. Chuck Pettee and Barbara Scott-Brier, July, water rights. Colleen Rassmussen, UW CPSU, August, Inventory & Monitoring, Phase I. Jennifer Whipple, plant taxonomist, YELL, October, herbarium project.

#### PLANNING:

Draft General Management Plan: The draft General Management Plan and Environmental Assessment was completed and submitted for public review on December 23, 1991 for 49 days. The draft was developed by Denver Service Center under the direction of Doug Cornell (Team Captain) and the CRMO staff. The draft plan recognized the following issues and problems:

Age of structures: All of the existing structures at CRMO from the road to the Visitor Center were constructed in the 1960's and served the monument and visitors well for over 25 years. However, they were designed for smaller crowds, a smaller staff and smaller vehicles.

Traffic: Proximity of the highway to the visitor center and the orientation of the parking areas creates stacking and traffic problems in peak seasons. The turn into the VC parking area is a left turn and the turn out to the loop drive is a left turn. Radii is too short for busses and large recreational vehicles.

Visitor Center: Exhibits are out of date and will not accommodate large groups such as tours or school groups. There is no audio visual area and no multipurpose room for environmental education programs.

Administrative facilities: The existing VC has limited office space as well as the Maintenance shops. Six of the twelve bays have been converted to office or storage and the remaining six are too small to drive in large equipment such as the snow plow, dumptruck, fire truck. The work bays are unheated and therefore inadequate for fire truck storage.

Entrance: The existing entrance is at the top of a hill and often missed by traffic. There is no transition from highway to the VC parking area. The entrance station is adjacent to the campground and produces confusion for visitors. The whole entrance area is a confusing mix of administrative facilities, park staff housing, campground, and visitor center activities.

Loop Road: The existing loop road lays well into the scene but has some safety problems. Turning radius of some corners are too steep for large vehicles. The existing mat is dry and brittle and has large cracks every fifteen feet.

Accessibility: Retrofits have been done but none are fully adequate. No trails are available for wheelchairs.

Campground: No hook-ups and most are not designed for the larger RV.

Watershed protection and difficult administration on the North Boundary: Section line boundaries in steep terrain cause problems for boundary identification and fencing to prohibit grazing.

Bicycles: Due to road cracking and the narrow lanes with curbs it is hazardous, though use is increasing.

#### General Management Plan Proposal:

Construct New Entrance: approximately 1/4 mile east of existing entrance. This new road would tie into the existing loop road just south of the campground.

Construct new Visitor Center on new Entrance road. Visible from the highway and with a view of the lava fields this new VC would have new exhibits, NHA book sales, an audiovisual room, multipurpose room and offices for the interpretive personnel.

VC Parking and traffic: Oriented to minimize traffic problems, the new VC parking would accommodate the larger busses and RV's

Reconstruct the Loop Road. The Entire loop road would be repaved. Possible addition of a bike lane and new pull-outs at key resource and visitor interest areas. No relocation and aesthetic a high concern.

Modify the North Boundary: Move boundary to ridge lines in land exchange with the BLM to protect watershed and provide better administration.

Convert old VC to Administrative headquarters and offices.

Modify the Maintenance Shops to accommodate larger vehicles and provide heated bays.

Emphasize resource protection: Increase air quality monitoring and revegetation of disturbed sites. Monitor deer population. Reduce intrusion of lawns and emphasize water conservation.

Move entrance station to new road intersection and away from campground.

Emphasize Environmental education outreach with schools.

Level campground sites to accommodate larger RV's

Provide accessibility to restrooms and one trail for the mobility impaired: Devils Orchard trail will be reconstructed to an interpretive trail emphasizing the management of resources and will be accessible to all.

#### Estimated Cost of the GMP Proposal:

|                          |                    |
|--------------------------|--------------------|
| Visitor Center:          | \$4,155,000        |
| New Entrance:            | 1,010,000          |
| Loop Road Reconstruction | 1,300,000 Estimate |
| Management Facilities    | 1,160,000          |
| Campground Corrections   | 150,000            |

|                     |                  |
|---------------------|------------------|
| Underground Utility | 109,000          |
| Big Sink Wayside    | 330,000          |
| <b>Total</b>        | <b>8,214,000</b> |

**PUBLIC USE:**

Visitation:      Total visitation: 217,879      4.9% increase over 1990

|      |         |       |          |      |      |
|------|---------|-------|----------|------|------|
| 1990 | 207,766 | 9.7%  | "        | "    | 1989 |
| 1989 | 189,317 | 12.8% | decrease | from | 1988 |
| 1988 | 217,022 | 7.0%  | increase | over | 1987 |
| 1987 | 202,800 |       |          |      |      |

Backcountry Use:      User Nights - 96      (1984-88 averaged 120/year, 1990 had 68 user nights.)

Overnight Use - 37 permits

Day Use Permits - 8 permits

North End hikers - 2 permits  
 North End bikers - 5 permits  
 Horse party - 1 permit (12 head)

Echo Crater accounted for 84% of all permits.

Arco Tunnel:      16 permits, 127 people      (1990: 13,38)

Fee Collection: Total fees collected: \$90,358.87      16% inc. over 1990

|       |           |                             |
|-------|-----------|-----------------------------|
| 1991* | 92,237.19 | * 1990/91 fees adjusted per |
| 1990* | 79,700.52 | Internal Investigation, see |
| 1989  | 73,566.21 | below                       |
| 1988  | 84,648.01 |                             |
| 1987  | 73,327.53 |                             |

1991 FEE BREAKDOWN

|                                        |                    |                                   |
|----------------------------------------|--------------------|-----------------------------------|
| <b>ENTRANCE STATION:</b>               |                    | (1990)                            |
| Single Entrance                        | \$39,981.00        | (28,017.)                         |
| Bus/Individual                         | 1,736.00           |                                   |
| Golden Eagle                           | 11,950.00          | (11,800.)                         |
| CRMO Pass                              | <u>10.00</u>       |                                   |
| <b>Total</b>                           | <b>\$53,677.00</b> | <b>(39,817.)</b>                  |
| <b>SELF-REGISTRATION ENTRANCE FEE:</b> |                    |                                   |
|                                        | <u>8,445.81</u>    | (16,747.)                         |
| <b>Total</b>                           |                    | <b>\$62,122.81      (56,564.)</b> |
| <b>CAMPGROUND:</b>                     |                    |                                   |
| Regular                                | \$28,056.96*       | (14,792.)                         |
| (Golden Age incl.)                     |                    |                                   |
| Group Camping                          | <u>50.00</u>       |                                   |
| <b>Total</b>                           |                    | <b><u>\$28,106.96</u></b>         |
| <b>TOTAL FEES COLLECTED FY 91</b>      |                    | <b>\$90,229.77      (71,356.)</b> |

## ADJUSTMENTS:

( 944.)

|                            |                    |           |
|----------------------------|--------------------|-----------|
| Emergency Gas Sales        | 117.20             |           |
| Overage/Shortage           | (+) 11.90          |           |
| TOTAL FEES DEPOSITED FY 91 | <u>\$90,358.87</u> | (72,300.) |

\*NOTE: 1991 camping fees increased from \$5 per site to \$8, 60% increase.

## VISITOR PROTECTION:

Internal Investigation: An Internal Investigation of the Fee Collection program took place in February. A \$9,391 deposit was submitted by an employee in February, no fees had been collected since October. Other, unaccounted funds were discovered in fee safes and the employee's desk; Regional Fee Coordinator Mark Forbes and MORA Chief Ranger John Jensen assisted for 2 days in March; the employee was proposed for a suspension in April, he resigned two weeks later. The \$9,391 deposit was split into two fiscal years, FY90 and FY91 totals show this adjustment.

Patrol Vehicle: New Jeep arrived in May, outfitted with light bar, shotgun rack, siren and control, and light control. Funded with \$1000 drug money.

Hunting Season: Edmonston and Miller patrolled north end extensively with assist from ID F&G agent Jon Heggen. No citations written or deer confiscated. One deer poached in-park off highway 1/2 mile west of VC. Contacts: 74 vehicles and 190 hunters. Kills: legal tags checked - 11, illegal kills known - 2 (one in Big Cottonwood).

Grazing Trespass: Barker case resolved out of court, after meeting with Assistant US Attorney, US Attorney in Boise writes opinion stating that prior grazing history precludes any prosecution pending boundary revision.

Medical Services: Equipment upgraded to EMT level response with purchase of O<sub>2</sub> bottle, demand valve regulator, and 2 EMS packs. Steve Sparhawk attended and recertified EMT-A; Edmonston recertified in CPR.

Film Permit: An Amy Grant music video was filmed over 4 days in September. Crew size was 30 with 10 vehicles. Locations were through-out the Loop Drive area. Reimbursable costs recovered by CRMO totalled \$575.10.

Plans: Winter Operations, Law Enforcement Needs Assessment, and Fee Collections SOP completed and approved.

Incident Reports:

Total incident reports - 22

|                        |      |
|------------------------|------|
| Vandalism              | - 8  |
| Agency assist          | - 3  |
| Motor Vehicle Accident | - 3  |
| Medicals               | - 3  |
| Training               | - 2  |
| DUI - arrest           | - 1  |
| Special Patrol - cave  | - 1  |
| Grazing Trespass       | - 1  |
| Edmonston              | - 13 |
| Fisher                 | - 7  |
| Sparhawk, St.          | - 1  |
| Sipe                   | - 1  |

Total cost of vandalism - \$865.

Citations:

Total Citations: 0

**INTERPRETATION:**

Development of a New Nature Trail: The interpretive staff examined the effectiveness of interpreting resource management concerns along the Devil's Orchard Trail. Temporary trail guides and waysides were produced and visitor response examined using the new Focus Group survey.

Park Handbook: A park handbook was published through HFC. The printing of this book was the product of six years of work.

VIP Program: For the fourth consecutive year, the monument recruited college students to serve as interpretive and resource management interns. With special VIP funding, the monument obtained all supplies and equipment needed to construct campground host site for use in 1992.

Trainee: The monument participated in a training program involving the detailing of an interpreter from PNRO to the monument for the summer season. This interpreter's time was divided equally between training and presentations of interpretive activities at the monument.

Museum Collection: 1991, a separate archives collection was established, a year of monitoring of climatic conditions and insect infestation was completed, and the cataloging and restacking of every volume in the monument's library was concluded.

Oregon Trail Coordination: The Chief Interpreter assumed the role of Oregon Trail Coordinator for Idaho and became a member of the Governor's working committee.

Celebration of the 75th Birthday: Several special programs emphasizing the history of the monument and the NPS were held during the summer. The monument also sponsored a special Living History Day with portrayals of Indian, mountain man, pioneer and explorer eras being presented by both staff and VIPs. This event marked the monument's first experience with a living history demonstration.

Wayside Exhibits: Utilizing cyclic maintenance funding, the monument was able to obtain additional copies of two wayside panels and convert three fiberglass waysides to meet current standards.

Educational Program: In 1991, publications, maps, posters, videos, slide sets and rock samples were gathered together, put into resource chests and then placed into over 20 school district offices within southern Idaho. Slide programs on the geology and history of the monument were later developed and added to the resource chests. Three new chapters--geology, history and activities--were produced for inclusion in the "Teacher's Guide." A desktop publishing program was obtained and utilized to compose graphic additions for the "Teacher's Guide."

Summer Activities: In addition to the traditional schedule of summer interpretive activities, an alternate schedule was implemented for a two-week period. A schedule involving an increase in roving and point interpretation along with a new guided walk during the evening hours was scrutinized. An analysis of the results indicated a more effective program could be developed using programs from both schedules. This new schedule will be tried in 1992. Additional programs on cultural history and the use of a video camera were tested as possible Saturday presentations directed at local residents.

## FACILITIES DEVELOPMENT/MAINTENANCE

Administrative Offices Remodeling: The front information desk, NHA, interpretation office area was redesigned and constructed to provide a separate office for each NHA and an interpreter. The maintenance office was insulated and paneled and a window installed.

Visitor Center Exhibit Area: Remodeling of the exhibit area was begun with the moving of the video/television and covering of the dark paneling with painted sheetrock.

Painting: The interior of the headquarters/visitor center building was painted from stem to stern.

Recycling Program: Maintenance division purchased aluminum collection cans and signs to make the recycling program more visible. A total of 663 lbs. of aluminum was collected and sold for \$131.25.

Trails: Heavy trail maintenance was performed by the YCC's on the tree molds and buffalo caves trails. The work consisted of extensive tread work and brushing. The Campground - North Crater Flow Trail was constructed.

Water System: A new well for the Monuments water system was drilled and a pump installed under contract.

Quarters: Residence #19 was rehabilitated with new paint, cabinets, and floor covering.

Storage: The CRMO boneyard was cleaned and organized by both YCC and maintenance seasonals. A clean-up day of other storage areas was conducted and excess material disposed of.

Signing: Interpretive highway wayside signs were rehabilitated with new bases and mounting systems. Also a new traffic barrier was constructed.

## COMMUNITY RELATIONS:

The new Superintendent joined Arco Rotary and the Lost River Chamber of Commerce. On three separate occasions, he addressed these groups on the planning efforts for Craters of the Moon and the changes the National Park Service was expecting due to the 75th Anniversary Symposium. The Superintendent also met with the County Commissioners, local interest groups and the Arco Mayor to gain a better understanding of the local public feeling towards Craters of the Moon.

## COOPERATING ASSOCIATION:

Cooperating Association: For the first time, the cooperating association was able to fill the Business Manager position on a year-round basis. During the year, the Business Manager was able to attend the NPS training course on Management of Cooperating Association. A full-time Business Manager was also instrumental in developing drafts of personnel policies, five-year goals and objectives and a new set of Articles of Incorporation. Considerable progress was made in the preparation of the text and artwork for the eventual publication of a book about life on the lavas. Work also continued on a book on the Snake River Plain being produced in a cooperative effort with Boise State University and now scheduled for publication in 1992. In cooperation with the monument's maintenance division, an office for NHA was constructed and new office furniture was obtained. Gross sales for the NHA exceeded \$140,000, a growth of 66% since 1987.

## WEATHER:

The 23 year annual precipitation average was 16.50 inches and the 1991 total was 14.82 inches. This is a continuation of a five year trend of below normal precipitation. The December 1991 snowpack was 1 to 4 inches.