

- Manzanita Lake, Lassen Volcanic National Park -

National Park Service
Department of the Interior

1995 Wildland Fire Report

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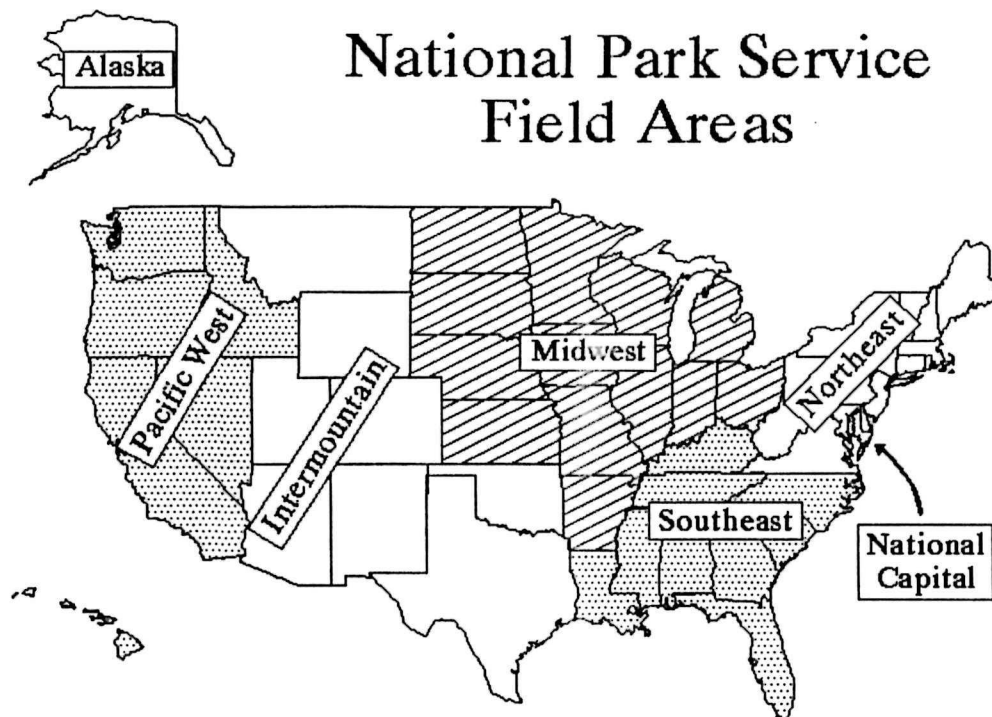
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The map pictured above depicts the results of National Park Service organizational restructuring. Within each **Field Area** are park clusters serviced by **System Support Offices (SSO's)**. Not all SSO's are staffed with fire management personnel. System Support Office fire management staff may support parks from other clusters. The following is a listing of the Field Area's and their representative SSO's:

- Alaska Field Area (**AKFA**)
 - Alaska System Support Office (**AKSO**)
- Pacific West Field Area (**PWFA**)
 - Columbia Cascades System Support Office (**CCSO**)
 - Pacific Great Basin System Support Office (**PGSO**)
 - Pacific Islands System Support Office (**PISO**)
- Intermountain Field Area (**IMFA**)
 - Rocky Mountain System Support Office (**RMSO**)
 - Colorado Plateau System Support Office (**CPSO**)
 - Southwest System Support Office (**SWSO**)
- Midwest Field Area (**MWFA**)
 - Great Plains System Support Office (**GPSO**)
 - Great Lakes System Support Office (**GLSO**)
- Southeast Field Area (**SEFA**)
 - Appalachian System Support Office (**APSO**)
 - Atlantic Coast System Support Office (**ATSO**)
 - Gulf Coast System Support Office (**GCSO**)
- Northeast Field Area (**NEFA**)
 - New England System Support Office (**NESO**)
 - Allegheny System Support Office (**ALSO**)
 - Chesapeake System Support Office (**CHSO**)
- National Capital Field Area (**NCFA**)
 - National Capital System Support Office (**NCSO**)

WILDLAND FIRE ACTIVITY SUMMARY

Alaska Field Area

Alaska experienced an extremely mild fire season in 1995 with only four wildfires occurring in National Park Service units (2 each in Wrangell-St. Elias and Yukon-Charley Rivers). Weather systems that usually set up over Alaska shifted eastward resulting in the major fire season experienced by Canada.

Intermountain Field Area

Overall fire activity in the Intermountain Field Area was significantly down from 1994 levels.

Cool temperatures and above normal precipitation in the Rocky Mountain Cluster parks resulted in low number of ignitions and acreage burned. The cluster had 15 suppression fires for a total of 45 acres, with the largest wildfire occurring at Little Bighorn National Battlefield (42 NPS acres). There were 10 prescribed natural fires totalling 4 acres. Grand Teton had 4 management ignited prescribed fires that totalled 41 acres.

Conditions were significantly warmer and drier in the Colorado Plateau Cluster parks than what was found farther north. There were 115 suppression fires that totalled 5,119 acres. The largest of these fires occurred in Grand Canyon. This fire was originally managed as a prescribed natural fire, but was converted to a wildfire. Additionally, there were 32 prescribed natural fires that totalled

1,496 acres. Most of these acres also occurred at Grand Canyon. There were 27 management ignited prescribed fires for the cluster that totalled 5,008 acres burned. Grand Canyon, Bryce Canyon and Dinosaur were the major contributors in this area.

Fire activity in the Southwest Cluster area, specifically Oklahoma, Texas, New Mexico, and Arizona was down considerably although overall potential was very high throughout most of the season. Spring presented normal to below normal temperatures, the usual wind events, and lower than normal precipitation but a well above average snow pack in New Mexico and Arizona. Parks in west Texas, southeast New Mexico, and southern Arizona quickly developed extreme fire conditions while the rest of the parks experienced virtually no potential due to delayed thaws, high runoff, and continued low temperatures. The air mass over the Southwest remained dry throughout the entire season and the summer monsoon was late, weak, and spotty. Despite the favorable fuel conditions in some areas, ignitions were not occurring as the atmosphere lacked sufficient moisture required to develop the necessary thunderstorms.

There were 150 suppression actions for only 6,378 acres, 44 natural outs (11 acres), 132 support actions, and five false alarms, for a total of 340 fires and 6,389 acres. Of particular note is the fact that for the first time in recent memory no Type I incident

management teams were utilized and only one Type II team was utilized. Overall resource mobilization was very light and in most cases was to support non-wildfire events outside the area.

Progress in the prescribed fire component was less than hoped for as several parks who had anticipated approved programs for 1995 were delayed by the National Park Service's reorganization effort. Nevertheless, 45 ignitions were accomplished for 10,204 acres with Big Thicket, Grand Canyon, and Bandelier leading the way. Two of the Service's experimental prescribed fire support crews were hosted in Saguaro and Bandelier respectively, and proved to be cost effective in supporting projects at the host parks as well as at other parks throughout the system. The fuels management program remains hampered by lack of necessary staffing and funding for the individual parks and the field area as a whole, sustaining the problem that we cannot treat the necessary acreage and we cannot monitor and adequately assess the effects of the burns completed. Until we can obtain the necessary human and fiscal resources it will be impossible to correct these deficiencies.

Midwest Field Area

The Midwest Field Area experienced a relatively normal wildfire year with early season concerns in many of the northern Great Lakes areas, and fall season concerns in the Missouri and Arkansas areas. Indiana Dunes, the usual high incident area, experienced 107 urban interface type fire responses. Ozarks was the second most active in

the field area with 40 responses. All park wildfires responded well to initial or extended attack efforts, and none developed into project fires, with the largest in-park fire being the ***Roundtop*** fire (530 acres) at Pea Ridge, and the largest adjacent-to-boundary fire being the ***Younghollow*** fire (1,200 acres) at Ozark. Voyageurs was a cross international boundary fire player this season, both receiving Canadian CL-215 aerial support on some of their initial attack, supplying initial attack themselves north of the border, and also being significantly involved in the joint internationally managed ***Sag Corridor*** fire burning 14,000 acres between the two countries on the adjacent Superior National Forest. Fire causes were within the usual norms, most being attributed to human causal factors with incendiary grudge fires being significant, and with lightning playing a minor role.

Out-of-area wildfire support was also normal this year with a total of only three crews and some miscellaneous overhead committed (two crews to northern Minnesota and Canada, and one to the western states).

While the field area has two parks (Voyageurs and Isle Royale) with approved prescribed natural fire programs, neither had significant acceptable natural ignitions occurring this year.

Parks in the Midwest experienced some difficulty in getting all of their management ignited prescribed fires off this spring, due to the lack of acceptable prescription windows.

Voyageurs was the heaviest impacted, having to cancel its *Wiyapka Lake* burn (600 acres) for the third year in a row. Forty-five prescribed fires were executed encompassing over 5,400 acres.

Indiana Dunes continued their multi-year urban interface hazard fuel reduction prescribed burning program around the communities of Ogden Dunes, Miller, and Dune Acres. The largest prescribed fire Everglades executed at the park was the *Cowles Dune* burn this year around the enclave of Dunes Acres. Prescribed burning was also continued to preserve the habitat of the endangered Karner blue butterfly. Partnerships were established with Midwest Steel to utilize prescribed fire on intermingled lands to enhance the Karner blue butterfly habitat.

Ozark continued to expand their prescribed fire program addressing ecosystem restoration of Rhyolyte glades. Six burns were executed. Lack of funding and extreme fall fire danger ratings precluded some projects. The park assisted other Missouri parks to execute their burning programs.

Voyageurs' prescribed fire program was constrained by the rapid transition from winter to summer fire indices, with continuing high fire danger ratings for most of the summer.

Buffalo continued to expand their prescribed fire program and assisted Arkansas Post in 4 significant burns.

Wind Cave remained active with their prescribed fire program, executing

1,000+ acre burns both at Wind Cave and Badlands, with a smaller burn at Devils Tower.

Four other smaller parks executed 19 management ignited prescribed fires also.

National Capital Field Area

Firefighters from parks in the National Capital Field Area participated in the suppression of 10 local fires; worked in mobilization centers; and performed other related duties.

Northeast Field Area

The New England Cluster parks in the Northeast Field Area had an average fire year, considering the extreme potential that existed during the late summer months. The largest fire of the year in the New England Cluster parks was a 220-acre wildfire at Gateway National Recreation Area. Support from the National Park Service Fire Management Program Center in the form of severity funding greatly reduced the potential of escaped wildland fires within the Northeast. The prolonged drought throughout the Northeast affected all land management agencies and as a result, in late August, a joint severity request was submitted by the National Park Service and the U.S. Forest Service. Through cooperation with the Forest Service and the State of New Hampshire, a mobilization center was established at Manchester, New Hampshire to stage a Type I air tanker, lead plane, portable retardant mixing plant, three Type II hand crews, a Type II Incident Management Team, and associated supplies. The air tanker made the first

recorded drop by a heavy air tanker in the northeast when it made three drops on a State of Massachusetts fire in September.

One Type II handcrew was mobilized to the *Rocky Point Complex* on Long Island. The *Rocky Point* fire, although on State of New York managed lands, had a major impact on the interagency coordination, training standardization and media involvement that will be felt by all agencies in the Northeast. Individual resources were mobilized to both the *Rocky Point Complex* and to the *Sag Corridor* fire in Minnesota.

One New England area firefighter was detailed to the Southern Area Interagency Hotshot Crew and another was assigned to the National Park Service hotshot crew detail program. Resources mobilized into the field area were specifically associated with wildland fire severity requests.

Due to the relatively light fire season in the West, no personnel were mobilized out of the geographic coordination area.

Prescribed fire projects within the New England Cluster included the successful ignition of the *Jordan Pond Vista* at Acadia National Park, and three days of research burns at *Lombard/Paradise Hollow* research area in Cape Cod National Seashore.

The spring of 1995 was unusually dry throughout the Chesapeake and Allegheny Cluster parks, and followed a very dry and mild winter. Very high to extreme fire danger readings were experienced beginning as early as

March 17. Although the fall fire season began as a very dry and potentially severe one, October rains fell at a rate that has been surpassed only twice since records have been kept. As a result, there effectively was no fall fire season for anyone in the area.

The State of Virginia began encountering heavy fire activity in spring, as did the local National Forest. Shenandoah National Park became actively involved in suppression on April 4, when the *Shenandoah Gap* fire broke out in a subdivision on private land near the park boundary and quickly spread into the park and surrounding private land. By the time this fire was brought under control, 1,070 acres had burned. Crews from as far away as Florida and Montana assisted in the suppression effort. Because of the superb interagency effort expended on this incident, only one home was lost.

Although the number of fire starts were down at New River Gorge, the spring of 1995 saw some of the most intense burning activity to date. Low spring fuel moistures and warm spring temperatures resulted in fires which actively burned well after dark. Drought conditions throughout the summer pushed the Keetch-Byram Drought Index well over 500. The *Underwood* fire exhibited flame lengths of more than 25 feet along with high rates of spread.

Very high to extreme fire dangers, combined with very low humidities and the proliferation of fires in the state and environs of Shenandoah National Park,

led to hosting of an initial attack module, consisting of two hand crews (Type I and II), two Type VI engines, and a Type II helicopter. This module, in addition to engaging in hazardous fuel reduction projects, participated in initial attack efforts on the *Shenandoah Farms* fire and the *Release* fire. In addition, two temporary air tanker bases were established in Virginia and coordinated by the Virginia Interagency Coordination Center located at Shenandoah .

The Eastern Interagency Coordination Center served this year as the Virginia Interagency Coordination Center (VICC), thus becoming the primary contact point for interagency mobilization in the state. VICC, at Shenandoah, directly supported several fires and responded to resource requests within the southern geographic area, which also included several hurricane recovery responses.

The largest incident requiring direct support was the *Castle Complex* wildfires that occurred in Jefferson National Forest in excess of 5,000 acres. VICC received orders for 38 crews in the first 24-hours of support. As a result of the excellent service provided, participating agencies were in agreement that the permanent residence of VICC should stay at Shenandoah National Park.

During the year, Shenandoah National Park experienced five fires for a total of 1,080 acres. Park personnel participated in suppression activities with local cooperators on an additional four fires for a total of 80 acres.

Delaware Water Gap forces suppressed eight initial attack wildland fires within the National Recreation Area for a total of approximately 5 acres. Delaware Water Gap personnel also assisted the New Jersey Forest Fire Service in suppressing a 750 acre fire in the adjacent Worthington State Forest.

New River Gorge National River resources responded to seven fires during the year. Fast response with engines contributed to keeping acreage's low and only around 93 acres were burned.

A total of 60 individuals from the Chesapeake and Allegheny Cluster parks were assigned as overhead and eight hand crews served on non-local fire assignments in such diverse areas as Virginia, Long Island, and Canada. A total of 39 individuals served as overhead on the various hurricane responses that occurred in 1995.

Pacific West Field Area

The past year was fairly typical in terms of numbers of wildfires in most of what used to be the Western Region (California, Nevada, Hawaii) but with higher than normal acreage burned, with only two fires (*Covington* at Joshua Tree and *Vision* at Point Reyes) accounting for much of the acreage. A wet winter and lack of lightning resulted in few wildfires or prescribed natural fires of any size at higher elevations, but did allow for a vigorous program of prescribed burning in many parks.

Notable wildfires included the *Eagle*, an escaped prescribed fire in June at Lava Beds (50 acres prescribed fire, 35 acres wildfire); the *Spirit Mountain* (named the *Miracle* fire initially) which burned about 1,500 acres at Lake Mead in August; and the *Bridal* which occurred relatively late in the year (October 24-28) at Yosemite and burned 150 acres.

The *Covington* fire at Joshua Tree was one of several large fires which occurred around the same time in August in the East Mojave Desert area of California. More than 1,000 personnel from 17 different agencies assisted in suppression efforts costing in excess of \$1.5 million; total acreage was 5,521.

The *Vision* fire started just outside Point Reyes' northeast boundary above the town of Inverness on October 3, from an illegal, unattended campfire and destroyed 45 private homes before spreading southwest into the seashore. In the next three days the fire covered over 11,500 acres of National Park Service land and cost \$5.1 million to suppress. Major emergency rehabilitation projects have been authorized for an additional \$450,000.

A heavy snowpack in the Sierra precluded an extensive prescribed natural fire season in California. The *Matthes* prescribed natural fire in Grand Canyon was converted to a wildfire and subsequently generated a substantial amount of discussion concerning prescribed natural fire overhead teams, prescribed natural fire

dispatching procedures, and the use of prescribed natural fire funds to pay for backfilling, hazard pay, and the use of emergency-hire AD employees on prescribed natural fires.

Because of the low to moderate fire danger conditions, a significant amount of management ignited prescribed fires were conducted, with more acres burned than in any previous year. A contributing factor to this success was the availability of the Prescribed Fire Support Crews.

Fire activity in the Pacific Northwest (now the Columbia Cascades Cluster) was relatively slow for the 1995 season. One of the slowest in recent memory. Ironically early on the fuel moistures west of the Cascades in northern Washington were very low and agencies were anticipating a very active fire season. Then spring rains came with frontal passages with very little lightning for the ensuing summer. The absence of lightning was one of the major contributors to such a slow fire season for the Pacific Northwest.

Olympic National Park's largest fire was the 15 acre *Delabarre* fire. This was managed under a confinement strategy. Crater Lake had a total of 17 fires, mostly class A and a few class B in size. Of the 17 fires, nine were human caused and eight were caused by lightning. The largest fire in Crater Lake was the lightning caused *Calypso* fire which grew to eight acres in size while being managed under a confinement strategy. All human caused fires in the park were suppressed at one-tenth of an acre each.

The only notable fire occurred at John Day Fossil Beds. The lightning caused fire was managed by the Prineville District BLM and burned over 420 acres, threatening the Hancock Field Station inholding.

Dry conditions in May in the North Cascades contributed to the *Taylor Creek* fire (259 acres) on Washington State DNR and U.S. Forest Service lands neighboring the NPS park complex. North Cascades National Park provided firefighters and overhead personnel for initial and extended attack. The incident's fire camp was located on the park's Marblemount Compound.

Lightning on September 4th ignited the 0.3 acre *Hock Mountain* fire in North Cascades in sub-alpine fuels. After a Fire Situation Analysis was completed, no control action was taken, and the fire went out naturally eight days later due to sparse fuel and high humidity.

A 20-acre underburn and test burn at North Cascades went well until unforecasted cloud cover moved in and the increased relative humidity prevented further burning.

Approximately five acres were ignited. Other burning consisted of 200 hand-piles created in hazard fuel reduction efforts.

Southeast Field Area

Fire potential and activity was relatively low during the spring fire season. Notable fires occurred at Great Smoky Mountains (50 acre *Stack* fire); Big South Fork (60 acre *Honey Creek* fires); and Gulf Islands (30 acre *Corey*

fire). Firefighters from the Southeast assisted in combating wildfires in Kentucky, North Carolina, and Arkansas. The Knoxville Air Tanker Base had its busiest spring fire season of the 1990's with 53 loads of retardant delivered by the two aircraft stationed at the base.

Due to high fire indices, Type III Incident Commanders were detailed to Cumberland Island in May and June to provide leadership in the event of a wildfire.

Great Smoky Mountains personnel from the Knoxville Air Tanker Base set up and operated a portable retardant mixing plant at Long Island, New York in support of fires occurring in New York during late August.

A small number of Southeast Field Area resources were dispatched to the Southwest, Rocky Mountains, and California in July and August to combat wildfires. Very few interagency resources from the Southern Geographic Area were mobilized for wildfires occurring both within and outside the area.

July was atypically dry in the Appalachians resulting in four lightning caused fires in Great Smoky Mountains which burned 25 acres.

Although fire potential was high in the early and late fall, fire activity was light in the Southeast Field Area. Notable wildfires included the 40 acre *Reeds Branch* fire on lands bordering and within Natchez Trace Parkway and the

25 acre *Weller* fire within Great Smoky Mountains.

Wildfire activity was low due to a wet summer and fall at Big Cypress and Everglades in Florida. Wildfire activity in Big Cypress was concentrated again in the Expansion Area. Their largest wildfire was the 1,500 acre *Wilson* fire. Everglades and Big Cypress fire personnel, along with assistance from the Florida Division of Forestry, Metro-Dade Fire/Rescue, U.S. Fish & Wildlife Service (Panther NWR), and U.S. Forest Service fought the 5,948 acre *E112* wildfire which burned in Everglades for four weeks.

The second consecutive year of above normal precipitation due to a number of tropical disturbances severely impacted the prescribed fire programs at Big Cypress and Everglades. During the past two years Everglades received 46 inches of above normal precipitation.

Big Cypress managed to prescribe burn (management ignited) 28,000 acres over a period of 30 ignition days. Everglades conducted six management ignited prescribed fires for 1,164 acres. They also reinstituted the prescribed fire program in the Pinelands which had been halted since *Hurricane Andrew* (late August, 1992). Five of the six management ignited prescribed fires were in the Pinelands. Everglades also

monitored three prescribed natural fires which totaled 562 acres.

Natchez Trace Parkway conducted fourteen management ignited prescribed fires for a total of 175.1 acres. Park firefighters helped with prescribed burning operations on both the Noxubee National Wildlife Refuge and the Tombigbee National Forest.

The Southeast Field Area fire office staff spent a fair amount of time in late summer and early fall providing assistance to parks affected by the following hurricanes: *Allison* (June); *Erin* (July); *Felix* (August); *Luis* and *Marilyn* (September); and *Opal* (October).

Both Southeast All-Risk Incident Management Teams were involved in providing assistance to the Virgin Islands National Park Group which was heavily impacted by *Hurricane Marilyn*. At the peak of the relief effort, September 27, 83 personnel from parks in the Southeast Field Area were providing assistance to the impacted area. At the same time, the Southeast Field Area provided incident management team overhead and law enforcement personnel to the U.S. Virgin Islands as requested by the U.S. Forest Service for the Federal Emergency Management Agency.

PROGRAM ACCOMPLISHMENTS

Fire Management Program Center

In compliance with the restructuring and reorganization of the National Park Service, the Branch of Fire and Aviation Management became the Fire Management Program Center, a field office of the Ranger Activities Division. The Branch Chief, Fire and Aviation Management position was abolished and those duties merged with those of the former Branch Chief, Resources and Visitor Protection, into the Deputy Chief Ranger position.

Further restructuring work occurred with an analysis of the role and function of central offices for aviation management oversight and assistance. The collateral duty regional aviation coordinator positions were abolished (with the exception of the full time position in the Alaska System Support Office) and those duties reassigned to parks, mid-level central aviation coordinators, and to the national aviation program manager.

Major accomplishments for the year included the development of a revised Federal fire policy, accepted by the Secretaries of the Interior and Agriculture on December 18, 1995. This policy revision is a major evolutionary step in fire management and focuses wildland fire response and management as a tool of resources and land management objectives.

The Federal Fire and Aviation Leadership Council was established in

1995. This council is composed of the Fire Directors of the five federal land management agencies and has as its purpose the interagency coordination of fire management programs and practices.

Center staff participated as team members in formation of national interagency Area Command teams. The Deputy Chief Ranger was selected as one of four national, Interagency Area Commanders, and the Fire Technology Specialist was assigned as a Planning Section Chief. Staff also assisted in formation of NPS Prescribed Natural Fire management teams and served in various team positions.

The Nation's highest award for wildland fire prevention, the Golden Smokey, was presented to three recipients on May 17, 1995, by Forest Service Associate Chief David G. Unger. Among the three recipients was Bill Clark, a Fire Management Specialist at the Fire Program Management Center, who was presented the award for his efforts in fire prevention on behalf of the National Park Service. His fire prevention analysis system has been adopted by all USDI resource management agencies and is part of the Forest Service fire prevention training conducted at NARTC in Marana, Arizona. Because of Bill's encouragement, the National Park Service became an active participant in the celebration of Smokey Bear's 50th Anniversary.

Program reviews were conducted at Yosemite (ranger activities); Mojave (interagency fire program); Dinosaur, Great Smoky Mountains, Zion/Bryce Canyon, Denali and Wrangle-St. Elias (fire program reviews); and Guadalupe Mountains and Grand Canyon (large fire review). FIREPRO program audits were conducted at Dinosaur, Guadalupe Mountains, Olympic, Yosemite, Crater Lake, and Grand Teton.

Center staff participated as members of the Interagency Management Review Team (IMRT) and task groups established by the IMRT for the purpose of implementing recommendations developed by the IMRT Final Report, completed June 26, 1995.

A Center employee participated as a member of the Prescribed Fire and Fire Effects Working Team (PFFEW) and the National Advisory Group for Fire Danger Rating (NAGFDR). During the year, the PFFEW continued to support course development and maintenance for the prescribed fire curriculum. Development work for Advanced Fire Effects, RX-540, was initiated while efforts continued on Prescribed Fire Monitoring and Analysis, RX-290, and Prescribed Fire Behavior Analysis, RX-590. Center staff also supported working team efforts in the presentation of the Prescribed Fire Liability Symposium in Tampa, Florida; the establishment of an Air Quality Task Group; and in the role of team liaison to course development steering committees. Center staff participated in NAGFDR ongoing efforts to provide input in the

maintenance and improvement of fire danger rating capabilities. In addition, this group responded to the Interagency Management Review Team's recommendation to develop a national interagency strategy and implementation plan to improve technical transfer of fire danger and fire behavior technology.

The Center sponsored an NPS Prescribed Natural Fire Workshop in San Francisco, California, for the purpose of review of significant prescribed natural fires from 1994 and analysis and identification of potential improvements to the program. This workshop generated 20 action items which have either been completed or have work continuing toward resolution. One significant issue identified at this workshop is the differences in agency policy and procedures in prescribed natural fire management. The identified action item resulted in the establishment of an interagency prescribed natural fire working team that identified nine additional action items. These items are identified in a final report to the Federal Fire and Aviation Leadership Council and provide for programmatic increases and reduction of agency differences in prescribed fire management.

Center staff served in support of work groups that prepared the major program component sections of the Federal Wildland Fire Management Policy and Program Review, chartered by the Secretaries of the Interior and Agriculture.

An intensive revision of NPS-18, Fire Management Guidelines, was begun in 1995 with completion planned for 1996, in conjunction with implementation of the recommendations of the Federal Wildland Fire Management Policy and Program Review, revision of the Departmental fire management manual, and revision of other Interior agency manuals.

The prevention analysis project completed the second year of the three-year process to deliver the new planning and workload software to the field in various workshops.

The FARSITE model has undergone the first full year of evaluation and through many field users' comments Version 2.0 was completed in 1995 and will be available for the 1996 fire season. FARSITE has been found to be very useful in prescribed natural fire management, fire management planning, and wildfires. We anticipate an active test year in 1996 to further develop the model and apply it to new situations.

The Interior Fire Coordination Committee's Fire Education Initiative completed the 4th/5th grade Fire Ecology curriculum package in conjunction with Ohio State University, and has made it available to schools and teachers. This product is the cornerstone to the interagency effort to present a more balanced view of fire in wildlands and the complex interactions.

The fourth year of a scheduled 10-year National Wildfire Coordinating Group suppression curriculum revision project was accomplished, with assistance from

a Center specialist and numerous National Park Service subject matter experts.

A test and instructor handoff session for the new "Fire Program Management" (FPM) course held in NARTC in November culminated a two year interagency development effort. This 60-hour course is closely tied to the "Fire Management Leadership" course for Agency Administrators, and will be required training for all National Park Service Fire Management Officers. The final FPM package will be completed, based on geographic area test sessions, during the summer of 1996.

Center staff supported the national two-week "RX-90 Prescribed Fire for Burn Bosses" that was held in Rapid City, South Dakota, hosted by Wind Cave and the Black Hills national parks.

Significant support was provided to national and regional training in the form of course coordinators, lead instructors, unit instructors, and workshop coordinators for the following courses: Area Command, S-620; Advanced Incident Management, S-520; Prescribed Fire Behavior Analyst, RX-590; Planning Section Chief, S-440; and Fire Ecology and Ecosystem Management.

Support was also provided in the form of presentations at the following workshops, symposiums, and meetings: Interior West Fire Council Annual Meeting, St. George, Utah; WESTAR, Wildfire and Prescribed Fire Workshop, San Francisco, California; Partners in Prescribed Fire Workshop,

Fort Collins, Colorado; and Prescribed Natural Fire Workshop, Portland, Oregon.

Center staff served on the program committee and as local arrangements coordinators for the 20th Tall Timbers Fire Ecology Conference, scheduled for May, 1996, in Boise.

Additional information transfer was facilitated by center staff through publication of articles in the National Biological Service annual report, *Our Living Resources*; the summer edition of *Park Science*; and in the proceedings of the Interior West Fire Council Annual Meeting. Papers were also accepted for inclusion in the *Fire Management Notes* and the 20th Tall Timbers Fire Ecology Conference.

Center staff, through the National Wildfire Coordinating Group, initiated the new *Firefighter Survival* training course, in cooperation with the California Department of Forestry, Fire Academy, in Ione. This course has been identified as a priority training development by the South Canyon Interagency Management Review Team (IMRT).

Assistance was provided in the coordination of the first National Wildfire Coordinating Group national conference in Phoenix, in February. Most of the working teams met during the conference, and presented workshops to conferees from throughout the wildland fire community.

Center staff assisted in an interagency review of DM485 "Safety and Health" policy, with emphasis on wildland fire investigations. This effort has brought Forest Service and Department of the Interior national fire/safety personnel into coordination with counterparts in safety/risk management, at both Departmental and bureau levels.

Lead was provided in an interagency fire task group in identifying essential fire competencies, and laid the groundwork for establishing qualifications and standards for fire program management personnel; a direction emphasized by both the IMRT and Federal Fire Policy Review.

Center staff participated in the Firefighter Safety Workshop in May, at Snowbird, Utah, and have participated in subsequent followup national safety actions.

A national Fire Management Intern program was developed, modeled along the same lines as the National Park Service Intake program, and will be initiated in 1996 if adequate FIREPRO funding and staffing becomes available through fiscal year 1996 appropriations.

Center staff participated as both students and instructors at a variety of national training courses, such as S-520, Fire Management for Agency Administrators, National Park and Wilderness Fire Management, and Ignition Management.

The past year was a relatively light activity year for structural fire occurrence in that there were no large loss incidents in terms of dollar value

or destruction of historically significant buildings or items. In a review of 31 incidents that made it to the Ranger Activities Division Morning Report, it appears that there was more than \$350,000 damage Servicewide. By comparison, this figure seems to be lower than previous years loss experience. It is difficult to make comparisons because of the lack of meaningful information collected about structural fire activities. We hope to improve this shortcoming by utilizing a portion of the CIRS/NIBRS reporting program to compile information on the subject.

Several parks are in the process of implementing the structural fire program review process that underwent initial development in 1994. The Presidio Fire Department, as part of the Golden Gate National Recreation Area, is one of the more complex arrangements for structural fire protection in the National Park System and is well along in their efforts to document their operational activities. Yosemite, Shenandoah, and Statue of Liberty are also putting forth considerable effort to organize and compile the requisite information. Other units that have exhibited interest include Dinosaur and Glen Canyon. As time and funds permit, the Program Center anticipates providing assistance.

The Structural Fire Specialist prepared a position statement and recommended a policy position for the Secretaries of Agriculture and the Interior to deal with the growing problem of wildland/urban interface issues.

On the subject of cross training with municipal fire agencies, the Structural Fire Specialist worked with the National Fire Academy (NFA), Training Data Exchange (TRADE), National Wildfire Coordinating Group (NWCG), and the National Interagency Fire Center (NIFC) training staff to identify the shortcomings in existing training delivery programs and focus attention on designing a more effective approach to providing needed information.

Efforts continue on the Steering Group of the National Wildland/Urban Interface Protection Program in changing environment and mission statements of member agencies. Participation and focus of direction will undergo increasing scrutiny for effectiveness and efficiency of programs.

Recommended additions to the Fireline Handbook were developed and submitted to address operational and organizational requirements for information gathering; contacts with local officials; interaction with local fire protection service providers; evaluation, planning, and integration with perimeter control divisions; tactical deployment and unique demobilization concerns.

Center staff implemented several changes to improve service to National Park Service fire program managers, as well as program managers in other Department of the Interior bureaus. A data link was established between the NPS FIREPRO subroutine in the Shared Access Computer System (SACS) and the NPS Federal Finance

System in Reston, Virginia, to improve numerical accuracy, simplify the initial allocation of appropriated fire program funds, and become more responsive to changes in field area funding needs. Due to the resulting workload reduction for Washington Budget Office staff, this electronic link may serve as a template for allocating other NPS program funds.

Activities and subactivities within two fire appropriations were redefined to improve accountability for Department of the Interior fire funds between all bureaus, and will provide for the important role of fuels management. Most significantly, this included the creation of a subactivity for prescribed natural fire operations in the Emergency DOI Firefighting Fund and the creation of an activity for fuels management in the Fire Protection Appropriation.

The National Park Service Administrative Payment Teams were assigned to several incidents, including the *Vision* fire in California, *Hurricane Marilyn* in Puerto Rico, and the *Matthes* fire in Grand Canyon.

The Shared Applications Computer System (SACS)/Wildland Fire Management Computer System (WFMCS) made a big move into the information super highway in 1995. A connection was established between the DEC Alpha computers and the DOINET (the Department of the Interior's wide-area-network access to the InterNet). Additionally, various fire information products have been made available via the DOINET. Information about the

SACS, including goals and mission statement may be viewed at <http://www.pas/sacsweb/sacs.html>. Fire and aviation management training schedules and national and National Park Service daily situation reports are available at <http://www.oas.gov/sacsweb/html/firemgt.html>. All training coordinators for DOI fire agencies and the Forest Service, are entering their training schedule information on our Digital system which is saving alot of time and effort. In the past, NPS re-entered all of this training information.

A major development effort was to accommodate organizational changes. In the not-too-distant future, we will be implementing the five-tier organizational structure in the FIREPRO III system. This will identify 5 levels of user/query structure for the NPS: national/servicewide level; field area level; cluster/SSO level; Park Area FMO level; and park level. Occurrence and incident qualifications programs are being positioned for this as well.

In early March final conversion to new formats in fire and daily situation reporting was accomplished. This process involved development of a National Park Service specific form DI-1202 which was distributed with instruction manuals, and revamped computer programs in the National Park Service Wildland Fire Management Computer System to accommodate the changes made. The changes were made to improve the reporting process and make the fire reporting database more responsive to agency specific needs.

Angie Feighert was selected as the secretary for the Deputy Chief Ranger.

Alaska Field Area

The former Alaska Region is now the Alaska Field Area, with the Alaska System Support Office (SSO) providing fire management support to the Alaskan Cluster of National Park Service field units.

National Fire Management Program Center staff assisted in site visits to Denali to consult on the proposed hazard fuel reduction program and reviewed Wrangell-St. Elias' existing hazard fuels program.

The hazard fuel reduction project at Wrangell-St. Elias proceeded smoothly with work completed at 10 sites. This work was accomplished in addition to activities at Bering Land Bridge, Yukon-Charley Rivers, and Lake Clark. Park cultural and natural resource management staff were integral in determining priorities, completing compliance documents, and administering the program. The Alaska SSO Historian worked with the State Historic Preservation Officer to insure that the hazard fuels program complied with the Programatic Memorandum of Understanding with the State of Alaska.

The System Support Office Fire Management Officer continues to serve as Steering Committee Chair for the national training course, *Fire in Ecosystem management*, presented at the National Advanced Resource Technology Center (NARTC), Marana, Arizona. He also assists with

presentation of S-290 and S-390 fire behavior courses for the interagency fire management community in Alaska. Superintendents at Kenai Fjords and Katmai/Aniakchak also serve on cadres for national level courses at NARTC.

Janet Passek, Prescribed Fire Specialist at Everglades, accepted the newly established Area Fire Management Officer position that is duty stationed at Denali. Janet is responsible for fire management activities at Denali, Northwest Alaska Areas, Bering Land Bridge, and Lake Clark. She also retains national responsibilities for FARSITE course development and presentation, and serves on the cadre for RX-590. Her arrival is a significant contribution to the National Park Service fire management presence in Alaska. It is hoped that a shared FMO position with the U.S. Fish & Wildlife Service can be established to serve Tetlin National Wildlife Refuge, Wrangell-St. Elias, Yukon-Charley Rivers and Bering Land Bridge.

Intermountain Field Area

The overriding event of the year was the Service's reorganization which significantly altered responsibilities and communication channels. For the most part, parks in the Rocky Mountain and Southwest Regions were merged into a new entity called the Intermountain Field Area (IMFA) which was subdivided into clusters. The Southwest Cluster contained many of the old Southwest Region parks however Jean Lafitte was moved to the Southeast Field Area and the Arkansas parks were moved to the Midwest Field

Area. On the other hand, the southern half of Arizona was moved from the old Western Region to the IMFA, thus ensuring no diminishment of the overall workload. The old Rocky Mountain parks in Montana, Colorado, and Wyoming remained in the new field area, for the most part, becoming the Rocky Mountain Cluster, and the parks in the southern Utah/four corners area became the Colorado Plateau Cluster. Parks in North and South Dakota became part of the Midwest Field Area.

All three clusters were to be supported by System Support Offices (SSO) but funding constraints limited this to the old regional offices in Denver (Rocky Mountain Cluster) and Santa Fe (Southwest Cluster). Although all three cluster offices qualified for FIREPRO staffing, funding and FTE constraints prevented this and a number of proposals were considered utilizing only the existing FIREPRO staff in Denver and Santa Fe.

A collective decision was made that the Denver office would provide wildland fire support to both the Rocky Mountain and Colorado Plateau Clusters with the Santa Fe office providing support to the Southwest Cluster as well as aviation support to all three clusters. Regardless of these administrative divisions there were some opportunities to consolidate portions of the program (*i.e.*, training, capital equipment, prescribed fire projects) on a field area wide basis allowing us to better serve the individual parks while at the same time better representing their collective needs to the Fire Management Program

Center, and we intend to continue to seek such opportunities in 1996.

As a result of staff shortages, combined with the disruption caused by the reorganization, the majority of the planned program reviews were not conducted and have been deferred to 1996. Program reviews were completed for Guadalupe Mountains, Hubbell Trading Post, Canyon de Chelly, Grand Teton, and Petrified Forest, as well as a review of the 1994 *Marcus* fire at Guadalupe Mountains and the 1995 *Mathes* fire at Grand Canyon.

Midwest Field Area

The old Midwest Region expanded into the new Midwest Field Area, picking up the fire management programs in three new states: Arkansas, North Dakota and South Dakota. The South Dakota Black Hills area parks have a particularly significant program, and the Arkansas area parks are expanding theirs, both operating through the efforts of area Fire Management Officer (FMO) organizations.

An area FMO organization was implemented this year between Voyageurs, Isle Royale, and Grand Portage, with Voyageurs supplying the FMO. This grouping encompasses two major prescribed natural fire parks (Voyageurs and Isle Royale). Efforts also moved forward for area FMO organizations encompassing the Missouri parks with Ozark supplying the FMO, and with an Indiana Dunes, Lincoln Boyhood, and Sleeping Bear combination with Indiana Dunes supplying the FMO.

The Eastern Area continued refining its new Type I Incident Management Team and the Midwest placed three members on the team, which responded to fires in northern Minnesota and Long Island, New York this season.

Midwest Field Area Fire Management Officer Ben Holmes served as the Agency representative on the Eastern Area Coordinating Group (Geographic Board), finishing his two year rotating tenure at year's end, relinquishing the role to Northeast Field Area Fire Management Officer Paul Head of the new Northeast Field Area.

Staff turnovers saw the August departure of Midwest Field Area Program Assistant Mary Palensky, and the arrival of Doris Morrow to the position.

Sleeping Bear detailed a trainee to the U.S. Forest Service's Southern Area Hotshot Crew in Asheville, North Carolina for their 5-month spring fire season to develop a crew boss. Indiana Dunes also detailed a crew boss trainee to the National Park Service's Alpine Hotshot Crew for three weeks.

National Capital Field Area

Partnerships with local agencies continued to develop and grow throughout 1995. The new interagency coordinating initiative, Virginia Multi-Agency Coordination Group (VMAC), which consists of representatives from the NPS's National Capital and Northeast Field Areas, the U.S. Fish & Wildlife Service, George Washington-Jefferson National Forests, and the

Commonwealth of Virginia, agreed in principle to establish a state coordination center and chose the Eastern Interagency Coordination Center at Shenandoah National Park as the host site and agency. The concept was fully tested this year during the active spring fire season which resulted in the mobilization of a Type I Incident Management Team to southwest Virginia. The newly formed MAC group managed the overall situation.

A second interagency module of five hand crews was developed to improve response capabilities for wildland fire and all-risk incidents occurring within the Virginia Zone and for mobilization of resources in response to needs outside the zone. All members of VMAC will participate in both modules.

Progress continues to be made towards the goal of increasing the response capabilities of park personnel. The Field Area hosted several training courses, provided self-study courses, and actively sought out opportunities for training assignments.

Carl Douhan, National Capital Field Area Fire Management Officer for the past 4 1/2 years, accepted a fire management position with the U.S. Fish & Wildlife Service in Region 6.

Northeast Field Area

Reorganization within the Northeast Field Area began to take place at the close of the year. The New England System Support Office Fire Management Officer (Paul Head in

Boston) and the Chesapeake/Allegheny System Support Office Fire Program Assistant (Pat Boucher in Philadelphia) will provide service to all parks within the Northeast Field Area. The FIREPRO-funded park Fire Management Officers will assume the duties as "Area FMO's" to non-FIREPRO parks within the clusters. A fire-dedicated dispatcher at the coordination center at Shenandoah will serve as the National Capital Field Area's Fire Program Assistant.

Doug Wallner, Fire Management Officer in the old Mid-Atlantic Region, will be reassigned to a new Eastern Prescribed Fire Specialist position that will assist parks within the Northeast, National Capital and Southeast Field Areas.

The Field Area's Program Assistant developed a dispatching handbook for detailers assigned to the Virginia Interagency Coordination Center (VICC), now located at Shenandoah; provided dispatch recorder training and assisted in a fire business management training session.

Delaware Water Gap hosted six NWCG courses. The park's Fire Management Officer (FMO) served as guest instructor at 10 interagency NWCG courses and also served as an evaluator for a new Tractor/Plow course. In addition, he also developed and presented a Fireline Safety Refresher course in two local sessions. The FMO also served as a member of a field assessment team that was tasked with the initial assessment of wind damage to the Adirondack Forest Preserve in upper New York state.

Training offered at Shenandoah included the Helitack Module with OAS, Basic Firefighter, Introduction to Fire Behavior, Incident Command System (2 sessions), and an in-park review of the South Canyon Incident was held for all park firefighters. In addition, instructor support was provided for other federal, state and local agencies.

The Shenandoah FMO, in conjunction with the Resource Management Specialist at Richmond National Battlefield Park, planned and executed a prescribed burn in April. The purpose of the burn was to evaluate the use of fire to remove unwanted shrubs and forbs from historic earthworks, and promote the spread of native grasses in the area. This was the first attempt at other than mechanical/chemical reduction of unwanted species in the study area.

Shenandoah served as a full participant in a local county's Urban Interface Advisory Committee. The park's FMO sat as a member of the County Urban Interface Steering Committee. As a part of the process, subdivisions surrounding the park were identified, located on the ground, and rated as to their vulnerability to wildland fire. Once this information was gathered, it was entered into a GIS map system. A major part of this process included development of a subdivision rating sheet, as well as educational handouts for individual homeowners and homeowner associations. Current plans call for the expansion of this program to include other counties surrounding the park (eight in all). In addition, S-205, Wildland Fire Operations in the

Urban Interface, was held in the park as a training adjunct to the task force project. The FMO also delivered an address to the Society of American Foresters Convention in Portland, Maine, on the wildland urban interface.

Pacific West Field Area

The totally-integrated BLM/NPS fire management program established at Mojave National Preserve was tested by a very active fire season in this area and generally performed very well. As of now, however, the fate of Mojave as a unit of the National Park Service remains unknown, with legislation returning management of the area to the Bureau of Land Management having passed (twice) only to be vetoed (twice) by the President.

Following several problems experienced with the National Park Service Type II handcrews during the 1994 fire season, a very productive two day Crew Boss Workshop was held at Golden Gate National Recreation Area Mobilization Site in February. Several procedural changes were implemented which should go a long way in eliminating many of these problems. And at long last, government VISA cards were made available to all Crew Bosses who wanted them.

We continue to believe that park FIREPRO audits and program reviews contribute to a strong, defensible overall program and reviews were conducted at Redwood and the Hawaiian parks, and a fiscal audit at Yosemite was accomplished by Fire Management Program Center personnel.

Preliminary discussions concerning a proposed Servicewide system to insure timely replacement of wildland fire engines were held with the Bureau of Land Management in Denver, where that agency maintains a highly-regarded replacement program ("Working Capital Fund"). It is hoped that an agreement can be reached with the BLM to use their existing system.

The fire effects monitoring system continued to grow in application throughout the Service. The increase in management ignited prescribed fire acres in the last few years is finally resulting in sufficient data to test the usefulness of the system to prescribed fire managers in their evaluation of program accomplishments and trends.

Berkeley Yoshida replaced Ken Hay as the Fire Program Assistant in the Pacific Great Basin System Support Office in February, bringing with him extensive abilities in personnel matters. Ken moved into a Budget Analyst position in the Fire Management Program Center.

The Columbia Cascades System Support Office hired a new Fire Management Officer, Ken Till, who reported on August 21st. The office continues to develop interagency cooperation and plays an active role in the Pacific Northwest Fire Coordinating Group. A statewide agreement for wildland fires is presently being developed for Washington state. This involves all federal agencies, as well as all state agencies.

Olympic National Park continued to support two area incident management

teams with personnel, as well as dispatching two crews, and several helicopter modules despite a slow fire year. The park continues its efforts to bring its prescribed natural fire program back on line but progress is slow due to constraints by endangered species (*i.e.*, spotted owls, Marbled Murrelett, and salmon). Hopefully by next year the program will be functional with close cooperation with the U.S. Fish & Wildlife Service. Olympic has remained as the lead agency for conducting the Western Washington firefighter and helicopter crewmember training sessions. In 1995 the park trained over 120 wildland firefighters from 11 different agencies and local fire districts, with a total of 42 helicopter crewmembers from six agencies. In addition, park staff instructed S-300, S-211, S-212, and two I-200 courses for local agencies while assisting with instruction of other fire courses with cooperating agencies.

Crater Lake fire lookouts were staffed by *Friends of Crater Lake*, a volunteer organization. This was the first year volunteers staffed fire lookouts and proved to be a useful program that will continue in 1996. A slow fire season allowed Crater Lake to provide support to other western parks for management ignited prescribed fire projects. The park provided overhead and crew members on several out-of-park assignments. In addition, engines and support crews, and overhead were sent to interagency suppression incidents in the Pacific Northwest.

A zone Fire Management Officer (FMO) was hired for a summer detail,

with a goal of increasing the operational coordination between NPS units in the North Cascades, Mount Baker-Snoqualmie National Forest, and the Northwest Region of the Washington State Department of Natural Resources (DNR-NW). The two Canadian agencies in the ecosystem were in the midst of reorganization during the summer and were unable to participate. The zone FMO (a U.S. Forest Service employee) based his operations in the State DNR-NW office. He supervised North Cascades' FMO and the Assistant FMO's in three districts of the National Forest and the North Cascades NPS Complex. At the end of the detail, representatives from the three agencies recommended that the zone FMO position be established on a permanent basis.

Fuels, vegetation, and site information were gathered for an area on the north edge of Ross Lake National Recreation Area, along the Canadian border. Fire management is a concern for this area because of the extensive evidence of past fires, and potential threat to United States and Canadian resource values at risk. The *Hozomeen Fire Management Study Report* contains information gathered from 15 monitoring plots, preliminary observations, and recommendations for further study.

The *Lake Chelan Forest Fuel Reduction/Firewood Management Plan* was finalized in September, and is part of the *General Management Plan/Environmental Impact Statement* for Lake Chelan National Recreation Area. This document and associated implementation plans meet the

requirements of a consent decree that resulted from a law suit filed by the North Cascades Conservation Council. Implementation of the plan began in September.

Southeast Field Area

A FIREPRO financial audit was conducted at Big Cypress. In addition, a fire program review, which included staff assistance from the Fire Management Program Center, was conducted at Great Smoky Mountains.

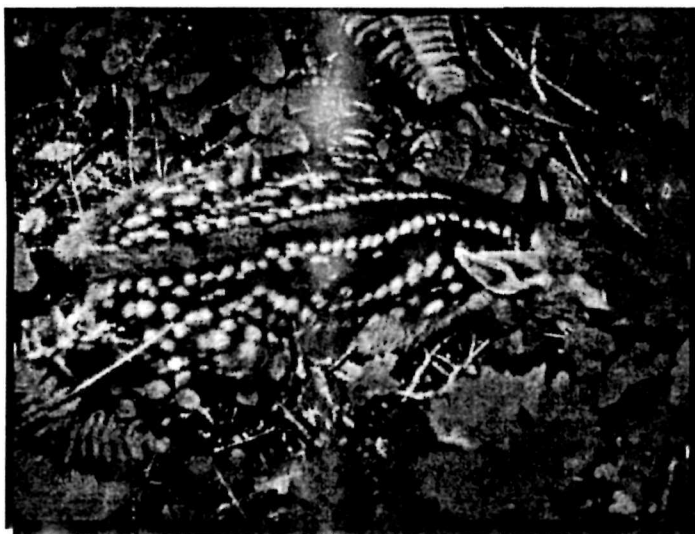
Fire specialists from the FIREPRO-funded parks provided the following assistance to other parks in the Southeast Field Area: fire effects monitoring (at Big South Fork, Cape Hatteras, and Congaree Swamp); fire prevention and analysis planning (at Big South Fork and Congaree Swamp); fire management plans (at Fort Caroline and Timucuan); and WIMS support (at Cumberland Island). The fire staff at Big Cypress has agreed to assist Cumberland Island in the development

and management of a management ignited prescribed fire program. The Okefenokee National Wildlife Refuge fire staff is assisting Cumberland Island in the seashore's suppression program.

Southeast Field Area fire training funds were used to support courses hosted by Natchez Trace Parkway, Everglades, Big South Fork, Great Smoky Mountains, and the Field Area fire office.

The draft Fire Management Plan for Great Smoky Mountains and its draft environmental assessment underwent public and interagency comment.

John Cannon replaced Frank Graham as the National Park Service Emergency Services Coordinator (Assistant Area Coordinator) at the Southern Area Coordination Center. Frank transferred to Big South Fork in July, 1995.



INTERAGENCY HOTSHOT CREWS

The National Park Service presently manages two interagency hotshot crews as part of its contribution to national interagency fire suppression resources. The crews' primary function is hot-line wildfire suppression. When not needed for suppression activities, the crews are able to make significant contributions on interagency prescribed fire operations and other natural resource projects.

The National Park Service crews are assigned to duty stations at host parks. The *Arrowhead* crew is permanently based at Sequoia and Kings Canyon National Parks, and the *Alpine* crew is permanently based at Rocky Mountain National Park.

In 1995 both crews were involved in a variety of projects in their host parks as well as in other National Park Service and U.S. Forest Service locations. Projects included: hazard fuels reduction at Mesa Verde and Rocky Mountain; fuel break construction in the Arapaho/Roosevelt National Forests; exotic plant removal at Lake Mead; prescribed fire prep work and burning assistance at Lake Mead, Grand Canyon, and Rocky Mountain; thinning conifer reproduction at Yosemite; trail, fence and facility maintenance at Rocky Mountain; and assistance in search and rescue activities at Yosemite and Mesa Verde.

Interagency Hotshot Crew Workload Distribution, 1986 - 1995

Year	Number of Fires	% Time Wildfire Suppression	% Time Prescribe Fires	% Time Other Projects
1986	35	50	13	17
1987	35	63	4	15
1988	31	79	3	3
1989	32	68	10	6
1990	26	54	9	12
1991	30	51	5	20
1992	29	54	5	29
1993	22	51	14	13
1994	46	82	2	9
1995	23	60	9	10

Interagency Hotshot Crew Wildfire Assignments, 1995

CREW	FIRE NAME	LOCATION	DATES
Arrowhead	Creek	Tonto NF	6/14/95
	Shed	Tonto NF	6/16/95
	Poison	Tonto NF	6/18-19/95
	Pipeline	Tonto NF	6/20-21/95
	Tank	AZ Strip BLM	6/29-7/1/95
	Tweed	AZ Strip BLM	7/2-4/95
	Bear	Sierra NF	7/9-11/95
	AB Misc	Grand Canyon NP	7/27-8/2/95
	Matthes	Grand Canyon NP	8/3-7/95
	Old Baldy	Phoenix BLM	8/8-9/95
	AB Misc	Phoenix BLM	8/10-14/95
	Powerhouse	Fresno CDF	8/23-24/95
	El Monte	Cleveland NF	8/27-31/95
	Poway	San Diego County	9/1-3/95
	Pots Peak	Wenatchee NF	9/4-8/95
	Owens	Oregon State	9/17-22/95
	Oat	Tule IR	9/25/95
	Mt. Vision	Marin County	10/4-16/95
Alpine	Red	Santa Fe NF	6/15-16/95
	John	Rio Grande NF	7/29-30/95
	Triangle	Grand Jct. BLM	7/30-8/7/95
	CIFC-153	Ontario, Canada	8/23-9/12/95
	Skull Cr.	Craig BLM	9/16-19/95



PRESCRIBED FIRE SUPPORT CREWS

Returning to the ecosystem is recognized as essential in the management of natural areas, both from the standpoint of maintaining historic vegetation communities and minimizing potential wildfire damage. In 1995 the National Park Service initiated the Prescribed Fire Support Crew (PFSC) pilot program for a nationwide resource committed exclusively to prescribed fire management.

The PFSC divided 20 people into four 5-person modules of skilled and mobile personnel solely dedicated to prescribed fire management. Applicants were selected for their qualifications in the areas of ignition, holding, monitoring, and fire behavior. For the 1995 season, beginning in mid-March and extending through the end of October, modules were recruited for and placed at Bandelier National Monument (New Mexico), Saguaro National Park (Arizona), Whiskeytown National Recreation Area (California), and Yellowstone National Park (Wyoming).

While many National Park Service areas have approved fire management plans which include both management ignited prescribed fire and prescribed natural fire, implementation is often hampered by the lack of qualified personnel at the local unit. This problem is further magnified when experienced firefighters are called out during times of national fire emergency. All too often, this occurs at the very time conditions in individual parks meet the prescription for either management ignited prescribed fire or for permitting lightning fires to be managed as prescribed natural fires.

Although the modules may be assigned work projects related to prescribed fire within their home parks, they are primarily available for work assignments as a national interagency resource. Schedules and priorities are set by the crew coordinator at the National Park Service's Fire Management Program Center located at the National Interagency Fire Center in Boise, Idaho. The modules are fully equipped and mobile and prepared to travel at a moment's notice.

Should a lightning fire occur under conditions specified within the area's approved prescribed natural fire plan, it immediately becomes the top priority for the PFSC. If the fire cannot be quickly and adequately staffed and managed, it must be designated a wildfire and suppressed, thus eliminating the potential benefits to the health of the ecosystem.

Compared to the extreme wildfire conditions experienced in 1994, the 1995 fire season was relatively quiet and much of the modules' workload was in the areas of hazard fuel reduction projects, handline construction for fall burns, establishing fire effects study plots, and igniting some prescribed burns.

The significance of the PFSC program cannot be measured by individual statistics; nor will it be readily apparent on graphs and reports for seasons to come. For decades, fire has been suppressed in natural systems, and the resulting fuel build-up and changes in vegetation patterns have been all-too-evident in recent catastrophic fire seasons. Valiant firefighters have died and precious natural resources have been destroyed.

Secretary of the Interior Bruce Babbitt, has called for aggressive steps to fund and implement prescribed fire on an interagency basis, calling such action the only way to break the vicious cycle begun with exclusion of all fire from natural lands. In developing this PFSC pilot program, the National Park Service has committed money and positions to be used exclusively for prescribed fire.

Total program accomplishments cannot always be easily quantified. In addition to prescribed natural fires and management ignited prescribed fires, modules worked on setting up and reading fire effects plots; mapping prescribed natural fire zones; locating control lines; preparing burn plans; setting up fuel transects; and completing archeology surveys, tree mortality transects, and aspen regeneration surveys.

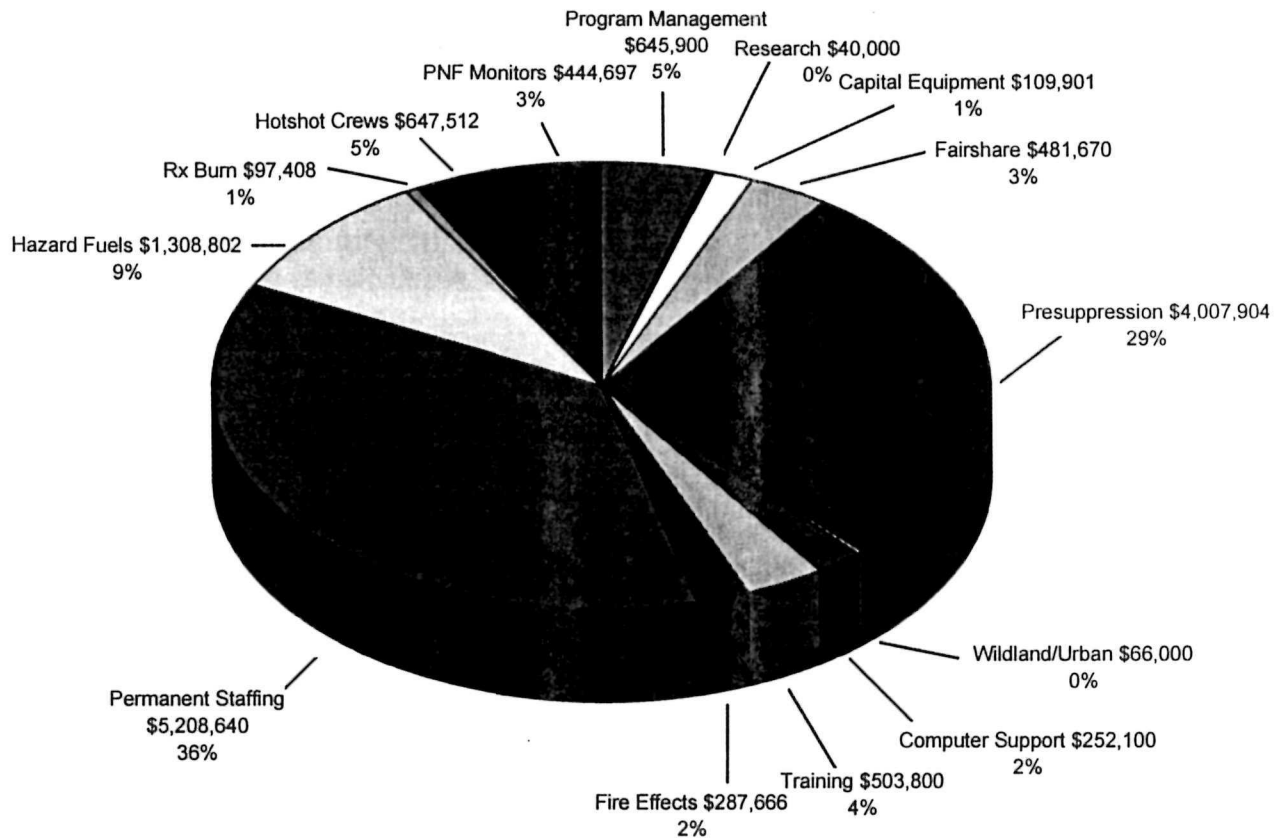
Quantifiable accomplishments are summarized in the following table.

Module	Prescribed Natural Fires		Management Ignited Rx		MIPF Preparation		Hazard Fuel Reduction	
	# of Fires	# of Acres	# of Fires	# of Acres	# of Fires	# of Miles	# of Fires	# of Acres
Bandelier	2	1,835	11	7,490	11	13.4	2	100
Saguaro	2	127	15	4,037	6	2.8	6	25
Whiskeytown	3	162	18	1,974	21	11.7	1	20
Yellowstone	5	1,842	7	632	5	1.5	1	2
**Totals:	6	2,165	46	13,709	42	27.5	9	147

MIPF = Management Ignited Prescribed Fire

****Total numbers may not add up due to the combined use of modules on assignments.**

FIRE MANAGEMENT AUTHORIZATIONS



SEVERITY FUNDING

Severity funding must be requested and approved through the National Park Service's Fire Management Program Center, National Interagency Fire Center.

Severity funding is intended to increase initial attack preparedness and fire prevention response to an anticipated long term fire potential greater than the normal fire year. The severe fire potential may be the result of long term drought, unusual fuel conditions or other conditions.

Severity differs from step-up planning in that step-up plans are approved by the System Support Office Fire Management Officer, and are driven by staffing classes which are determined by the burning index. Step-up plans are shorter term increases in preparedness and prevention. Severity funds must be terminated as soon as conditions return to the normal fire year.

Severity appropriations in 1995 provided for overtime costs for regular employees to increase preparedness; extend seasonal FIREPRO personnel tours of duty; preposition various aircraft with support personnel, and other necessary incident management personnel in the northeast to deal with the unusually severe wildfire potential in that area.

FIELD AREA	REQUESTING UNIT	AMOUNT
Northeast	Acadia National Park	\$60,000
	New England System Support Office	\$200,000
Intermountain	Guadalupe Mountains National Park	\$5,000
Midwest	Ozark National Scenic Riverways	\$8,000



INTERAGENCY FAIRSHARE PROGRAMS

FIELD AREA	REQUESTING UNIT	DESCRIPTION	AMOUNT
Fire Management Program Center		NWCG Operations Support	\$57,915
Pacific West	Columbia Cascades SSO	Air Tanker Operations	\$51,000
	Pacific Great Basin SSO	Coordination Centers	\$24,900
	Lassen Volcanic	Susanville Interagency Dispatch Center	\$10,000
Intermountain	CO Plateau/Rocky Mountain SSO	USFS: Northern Rockies; R1/FIDC; RMACC. BLM: WSFCC/CO; WICC/WY. DOI position/Missoula. MT Eastern Great Basin Coordination Center.	\$106,750
	Southwest SSO	Arizona Smoke Management Coordinator	\$3,500
	Grand Canyon	Air Tanker and Dispatcher	\$76,000
	Saguaro	Interagency Helicopter	\$8,275
	Dinosaur	Aircraft Contract	\$7,000
Midwest	Wind Cave	Interagency Helicopter	\$7,050
Southeast	Southeast Field Area	Helicopters, Southern Area Coordination Center, Regional Cache	\$20,000
	Great Smoky Mountains	Interagency Air Tanker Base	\$22,800
TOTAL:			\$395,190

1995 SERVICEWIDE FIRE STATISTICS



- Great Smoky Mountains National Park -

NORMAL FIRE YEAR STATISTICS

The normal fire year calculation is based on an analysis of National Park Service fire history for 10 years from 1986 through 1995. "Normal" occurrence is defined as the third worst year in a 10 year analysis period, and the statistics for each size class may be derived from different years.

SIZE CLASS IN ACRES	NUMBER OF WILDFIRES	NUMBER OF PRESCRIBED NATURAL FIRES
A (0 - 0.2)	496	73
B (0.3 - 9.9)	285	29
C (10 - 99.9)	63	10
D (100 - 299.9)	26	12
E (300 - 999.9)	16	7
F (1,000 - 4999.9)	14	7
G (5,000+)	5	1
TOTALS:	905	139

Start Days: 313 (Wildfires); 300 (Prescribed Natural Fire)

Peak number of starts in a day: 36 (WF); 38 (PNF)

NATIONAL FIRE ACTIVITY

FIRE TYPE	# FIRES	NPS ACRES
Suppressed on NPS lands by NPS full control strategy	515	27,250.4
Suppressed on NPS lands by NPS modified control	27	101.0
Suppressed on NPS lands by other federal agency	4	2.5
Suppressed on NPS lands by non-federal agency	54	454.5
TOTAL WILDFIRES:	600	27,808.4
 PRESCRIBED NATURAL FIRES	 50	 3,164.1
MANAGEMENT IGNITED PRESCRIBED FIRES	226	50,846.4
TOTAL PRESCRIBED FIRES	276	54,010.5
 NATURAL OUTS ON NPS LANDS	 141	 238.0
MUTUAL AID BY NPS ON OTHER LANDS	249	6,209.4
SUPPORT ACTIONS (NON-LOCAL)	618	
FALSE ALARMS	92	

WILDFIRES BY SIZE CLASS

SIZE CLASS IN ACRES	AGENCY LANDS		ALL LANDS
	FIRES	ACRES	ACRES
A (0 - 0.2)	350	38.3	38.5
B (0.3 - 9.9)	168	286.3	311.5
C (10 - 99.9)	55	1,614.7	1,793.7
D (100 - 299.9)	10	1,587.1	1,891.0
E (300 - 999.9)	10	4,769.0	6,174.0
F (1,000 - 4,999.9)	5	8,044.0	12,212.0
G (5,000+)	2	11,469.0	11,469.0
TOTALS:	600	27,808.4	33,889.7

There were 600 wildfires reported on NPS land in 1995, which is 66 percent of the normal fire year calculation. Approximately 86 percent of the wildfires were controlled at under 10 acres in total size.

WILDFIRES BY CAUSE

CAUSE	NATIONAL PARK SERVICE LANDS			
	# FIRES	# ACRES	% FIRES	% ACRES
Lightning	170	17,528.4	28	63
Campfire	120	202.4	20	1
Smoking	37	365.7	6	1
Debris Burning	27	96.3	5	0
Incendiary	76	2,676.0	13	10
Equipment Use	22	100.2	4	0
Railroads	31	275.8	5	1
Children	14	11.2	2	0
Miscellaneous	103	6,552.5	17	24
TOTALS:	600	27,808.4		

LARGE WILDFIRES

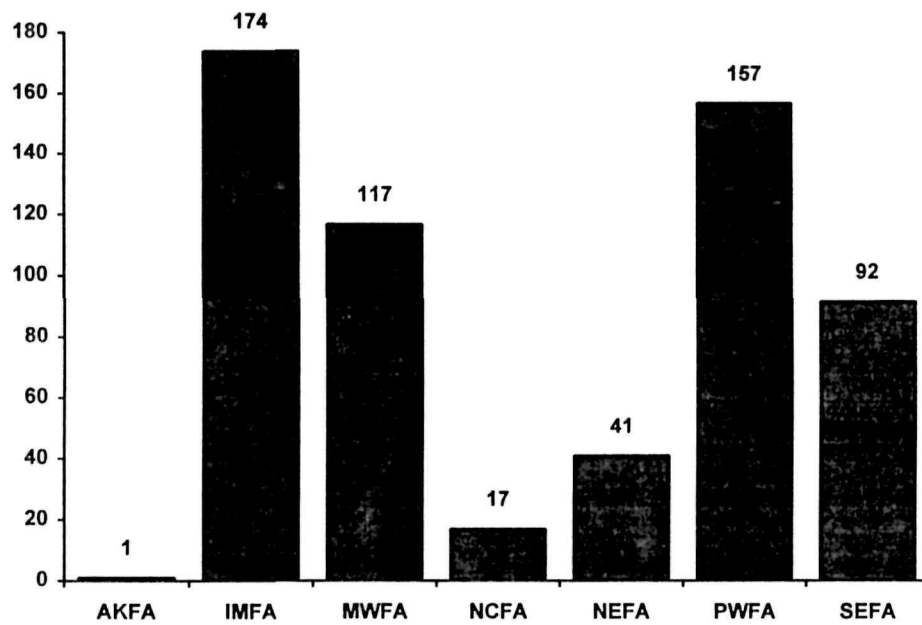
FIELD AREA	PARK	FIRE NAME	NPS ACRES	TOTAL ACRES
Intermountain	Little Bighorn	Battlefield	42	2,500
	Lake Meredith	Dam-Fire	920	1,650
Northeast	Shenandoah	Shengap	90	1,070
Southeast	Everglades	E112	5,948	5,948
Pacific Great	Grand Canyon	Towers II	3,292	3,292
Basin	Joshua Tree	Covington	5,521	5,521
	Lake Mead	Nevershine	3,700	3,700

LARGE MANAGEMENT IGNITED PRESCRIBED FIRES

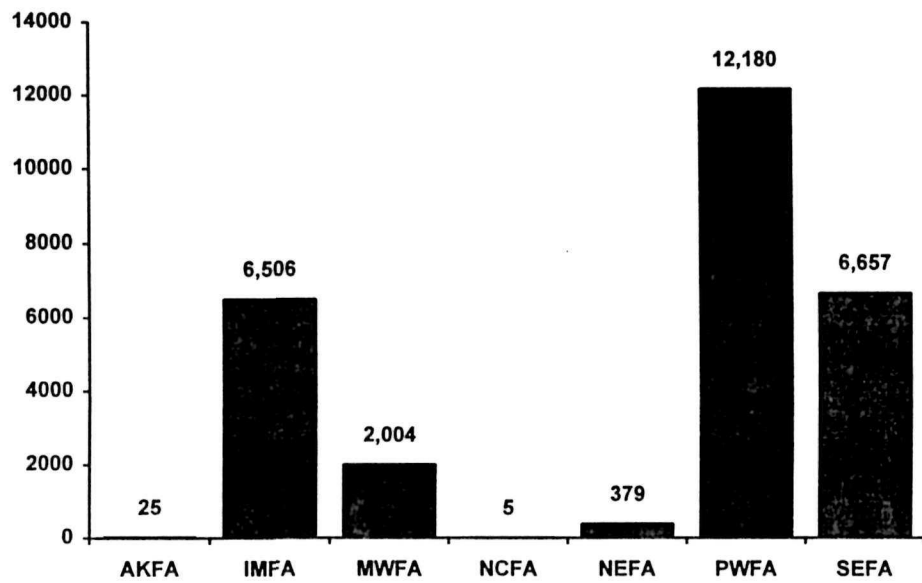
FIELD AREA	PARK	FIRE NAME	ACRES	FUEL TYPE	COST/ ACRE
Midwest	Badlands	Baysinger	1,397.0	Grass	4.70
Intermountain	Carlsbad Caverns	N.Boundy-A	3,600.0	Grass	5.00
	El Malpais	Agua Fria	1,038.8	Timber	29.00
Pac. Gr. Basin	Channel Islands	Sauces	1,200.0	Grass	6.00
	Santa Monica Mtns	Boundary	1,005.0	Grass	14.33
Southeast	Big Cypress	Wootbirdrx	1,661.2	Grass	2.47
		Copelandrx	1,000.0	Grass	0.93
		Airplanepr	2,093.6	Grass	1.05
		WB RX#2	1,107.0	Grass	2.47
		Ochopee2rx	1,897.8	Grass	1.87
		Brownthom	3,525.1	Grass	1.98
		Baxisle2rx	1,357.0	Grass	1.35
		Lostpinerx	3,443.5	Grass	1.19
		Airplane+	6,279.8	Grass	1.05
		CP #2 Rx	2,259.1	Grass	0.93
		Baxisle1rx	1,150.2	Grass	1.35

There were 226 management ignited prescribed fires completed during 1995 for a total of 50,847 acres treated. The largest burn program was conducted at Big Cypress, where 15 management ignited prescribed fires treated 27,111 acres.

WILDFIRES BY FIELD AREA

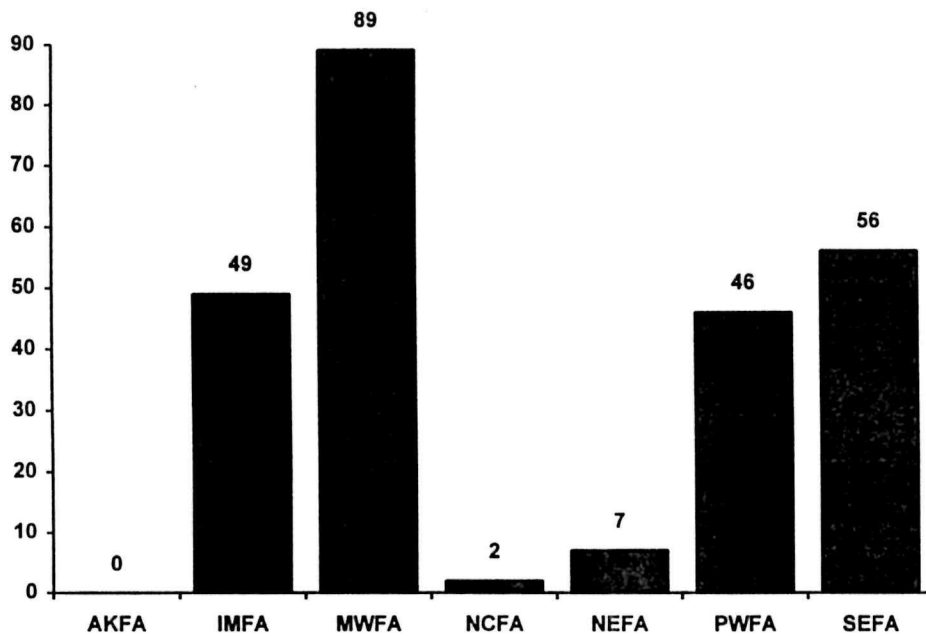


Number of Fires



Number of Acres

MUTUAL AID RESPONSES BY FIELD AREA

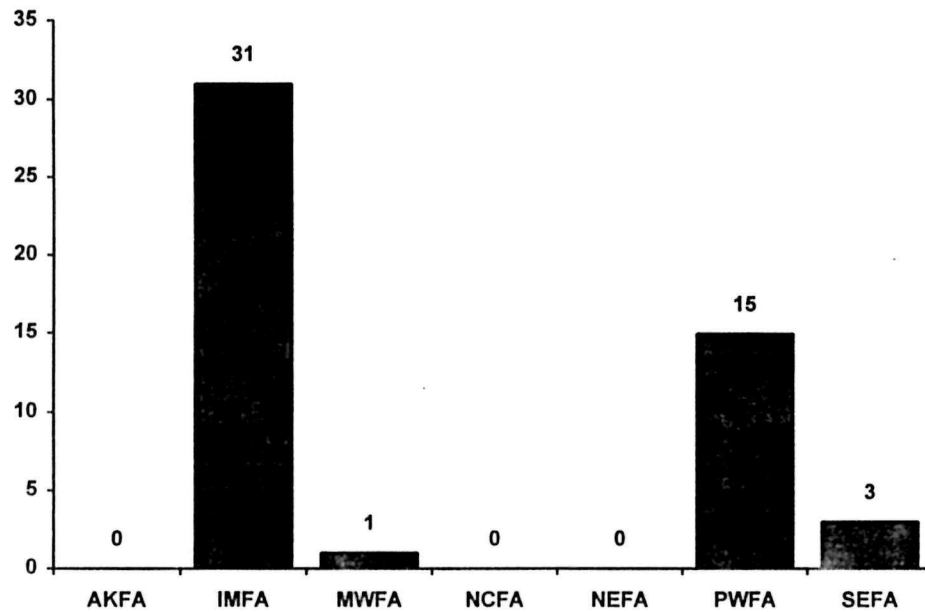


Number of Responses

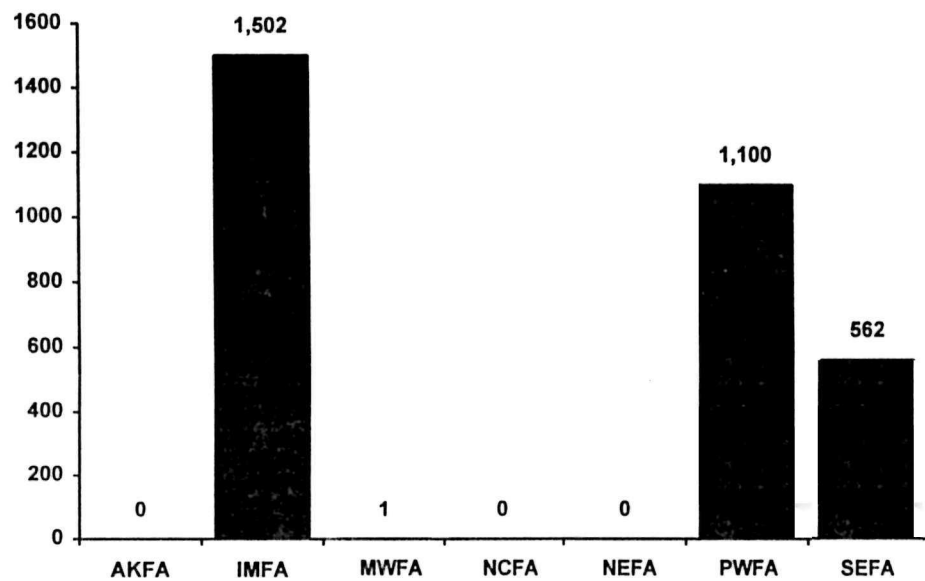
Key:

AKFA =	Alaska Field Area	NEFA =	Northeast Field Area
IMFA =	Intermountain Field Area	PWFA =	Pacific West Fiels Area
MWFA =	Midwest Field Area	SEFA =	Southeast Field Area
NCFA =	National Capital Field Area		

PRESCRIBED NATURAL FIRES BY FIELD AREA

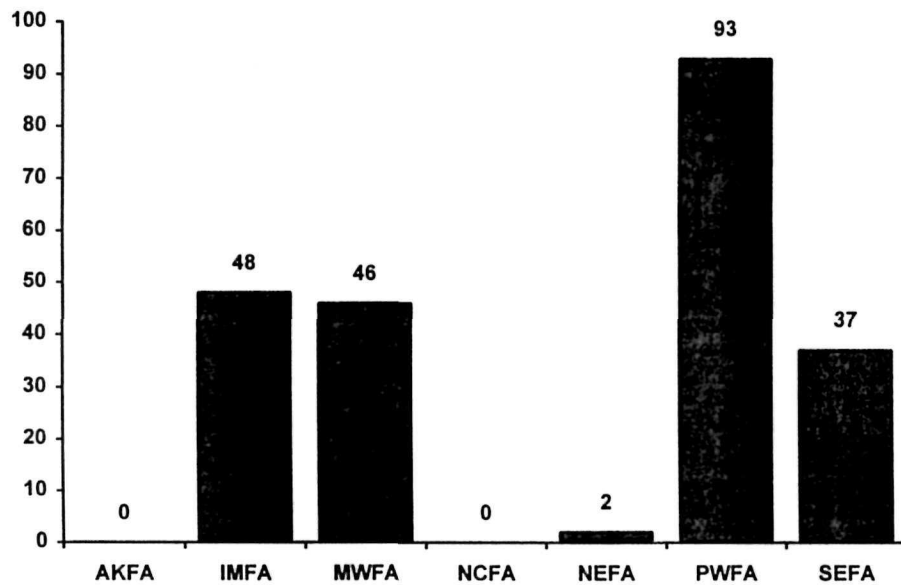


Number of Fires

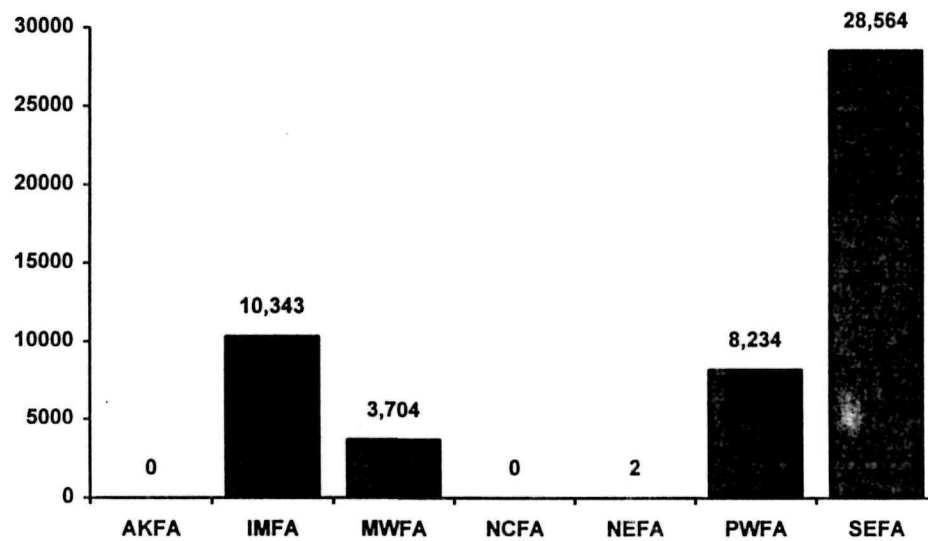


Number of Acres

MANAGEMENT IGNITED PRESCRIBED FIRES BY FIELD AREA

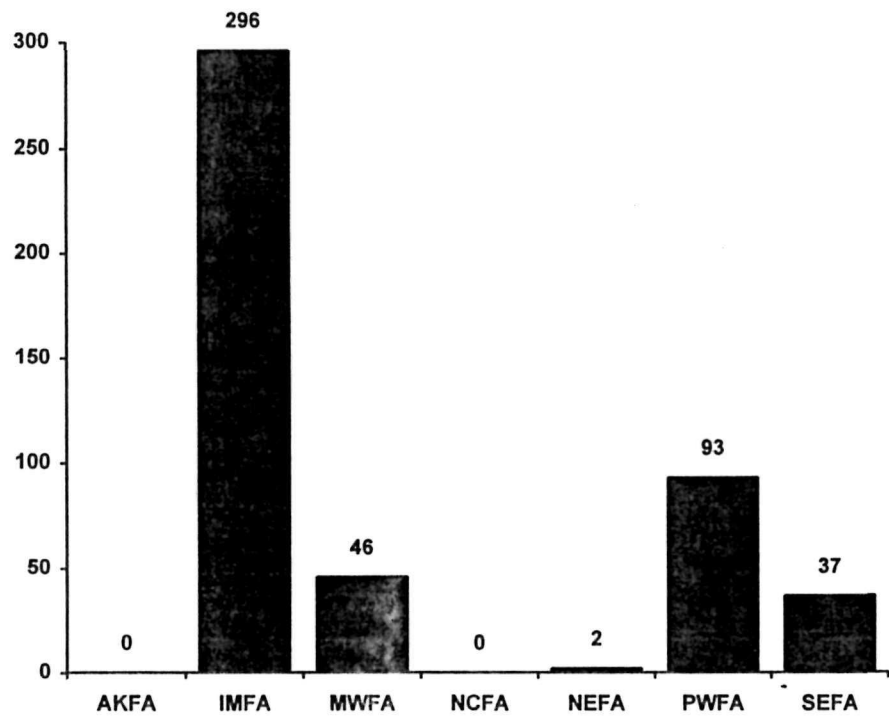


Number of Fires



Number of Acres

SUPPORT ACTIONS BY FIELD AREA



Number of Support Actions

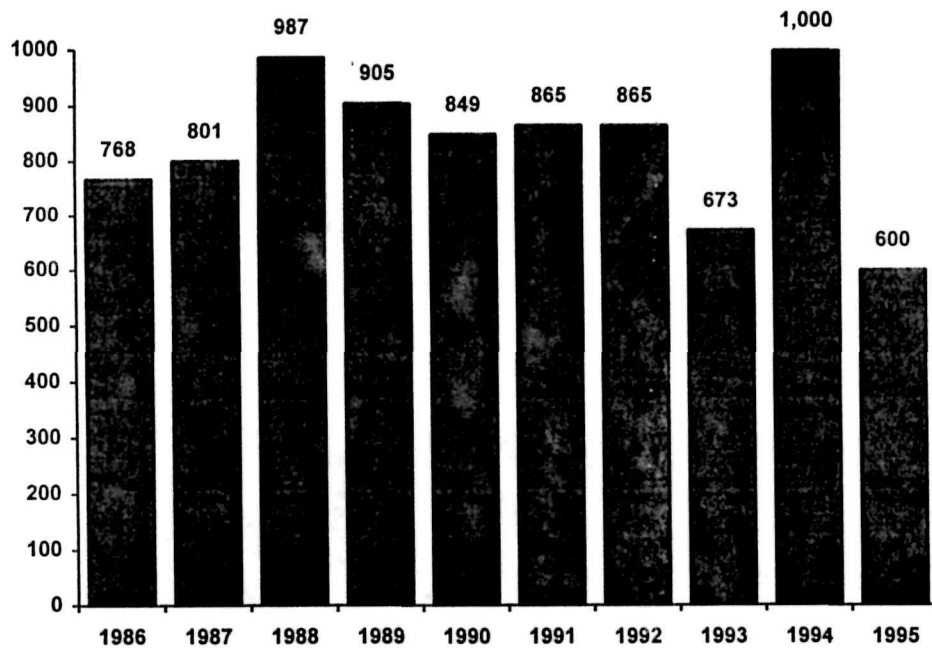


1986 - 1995
FIRE STATISTICS
SERVICEWIDE

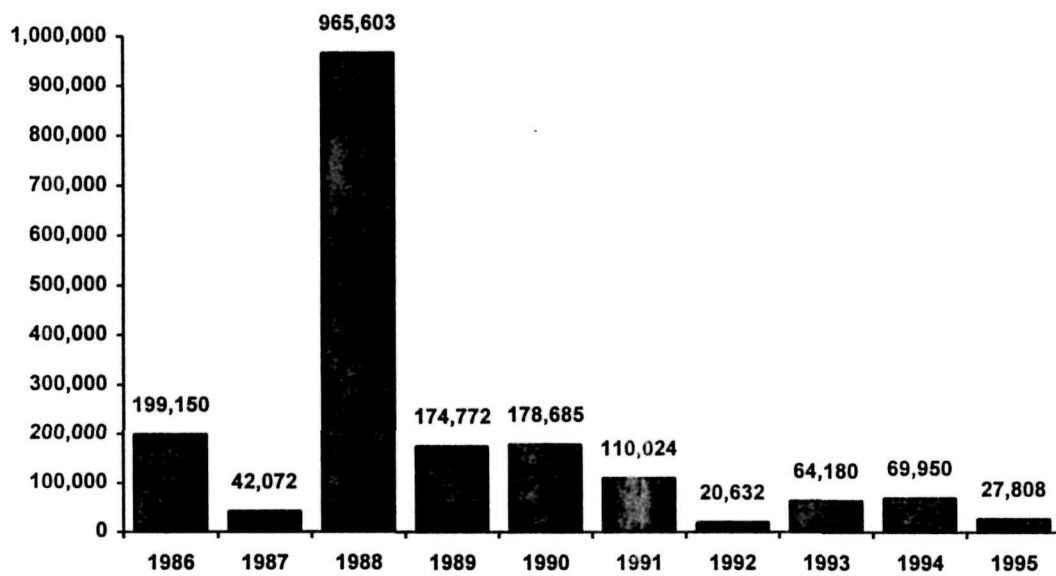


- Hazard Fuel Reduction, Pinnacles National Monument -

NPS WILDFIRES, 1986 - 1995

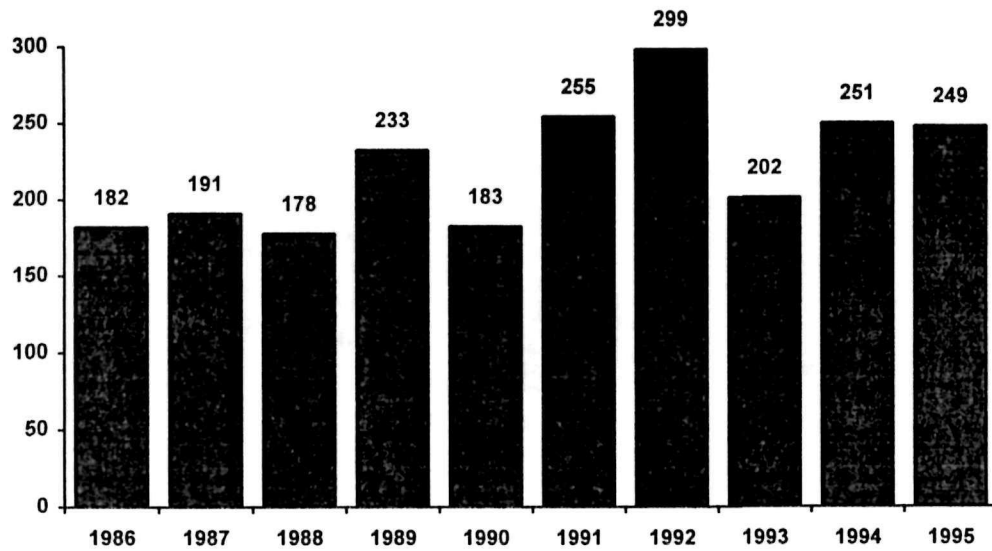


Number of Fires



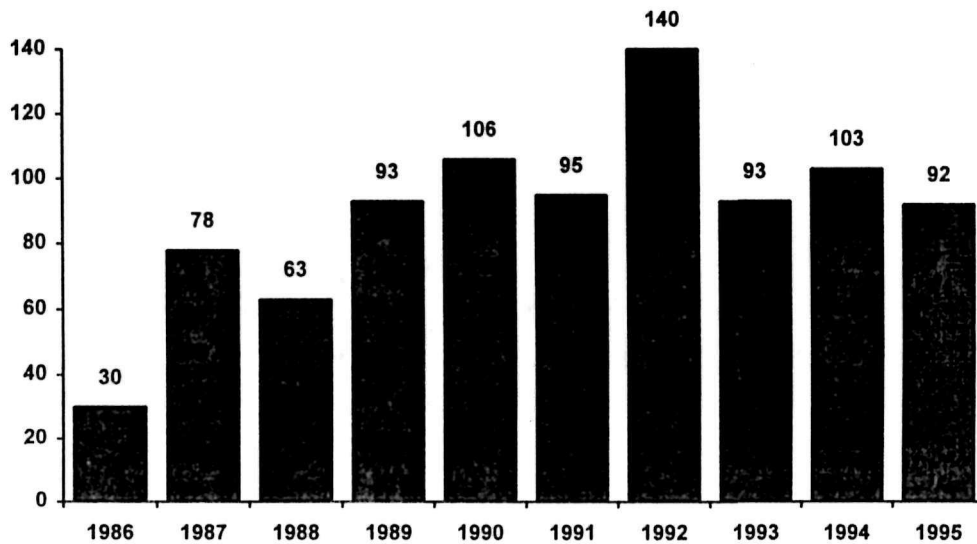
Number of Acres

NPS MUTUAL AID RESPONSES, 1986 - 1995



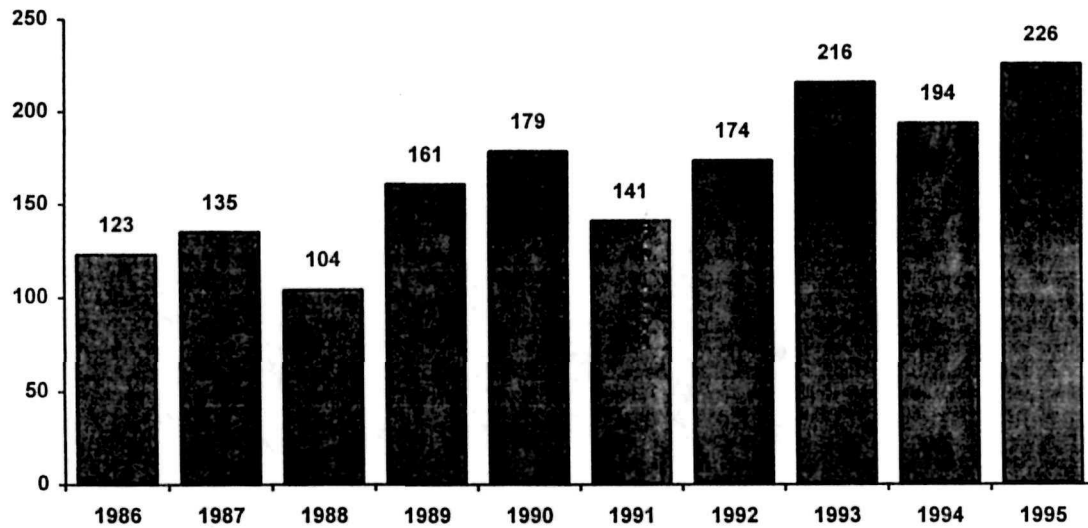
Number of Responses

NPS FALSE ALARMS, 1986 - 1995

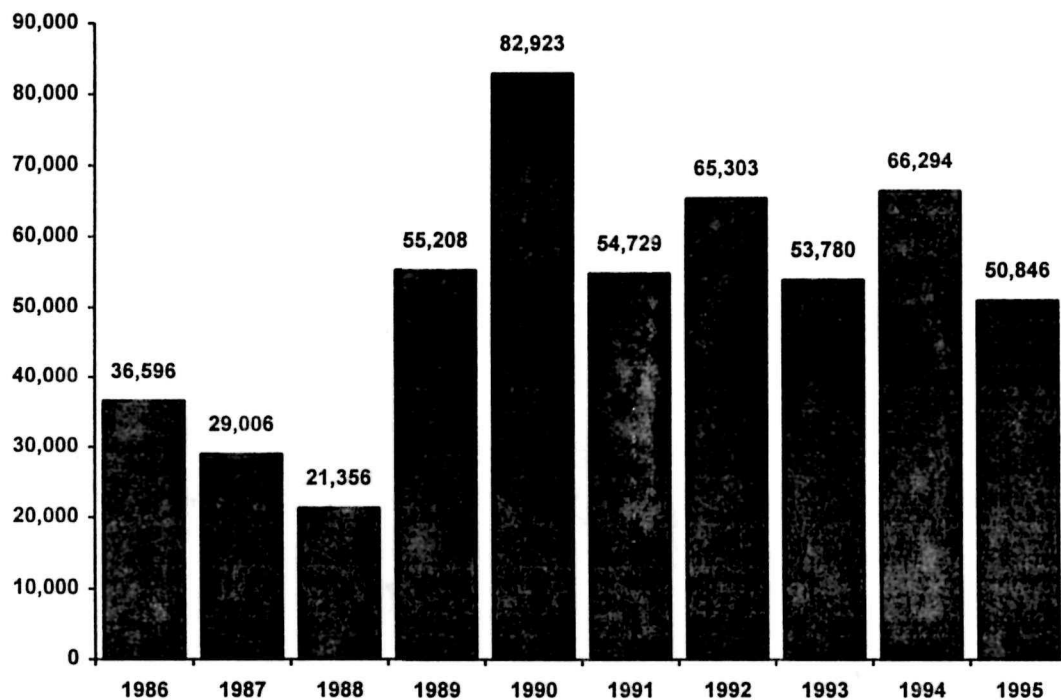


Number of False Alarms

NPS MANAGEMENT IGNITED PRESCRIBED FIRE, 1986 - 1995

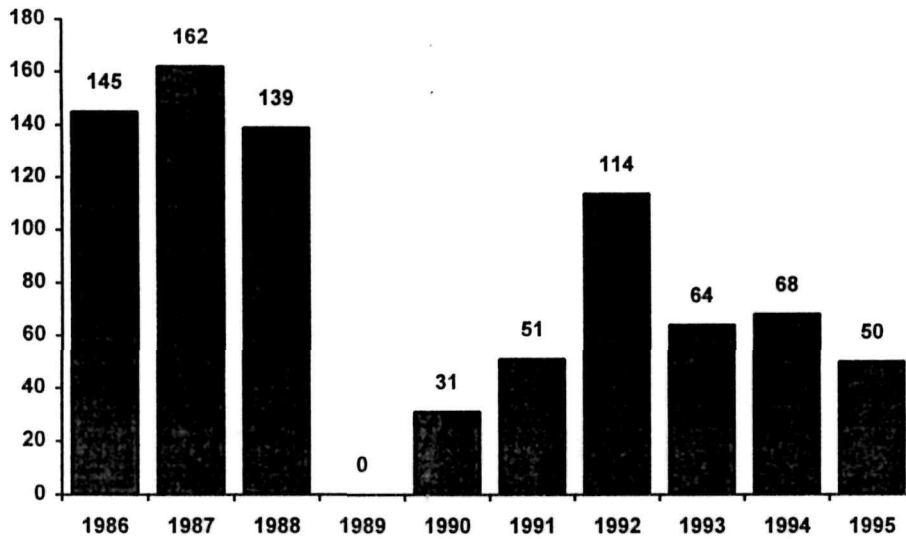


Number of Fires

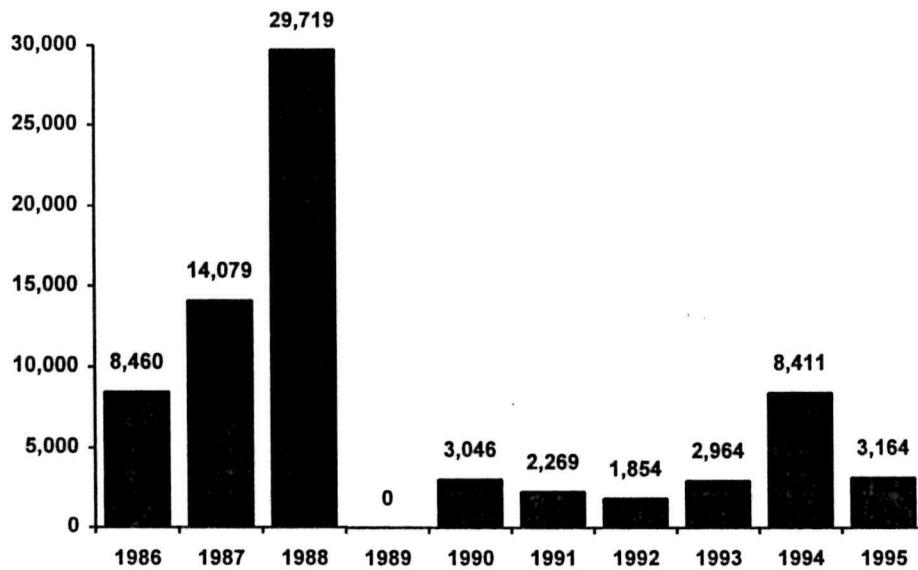


Number of Acres

NPS PRESCRIBED NATURAL FIRES, 1986 - 1995

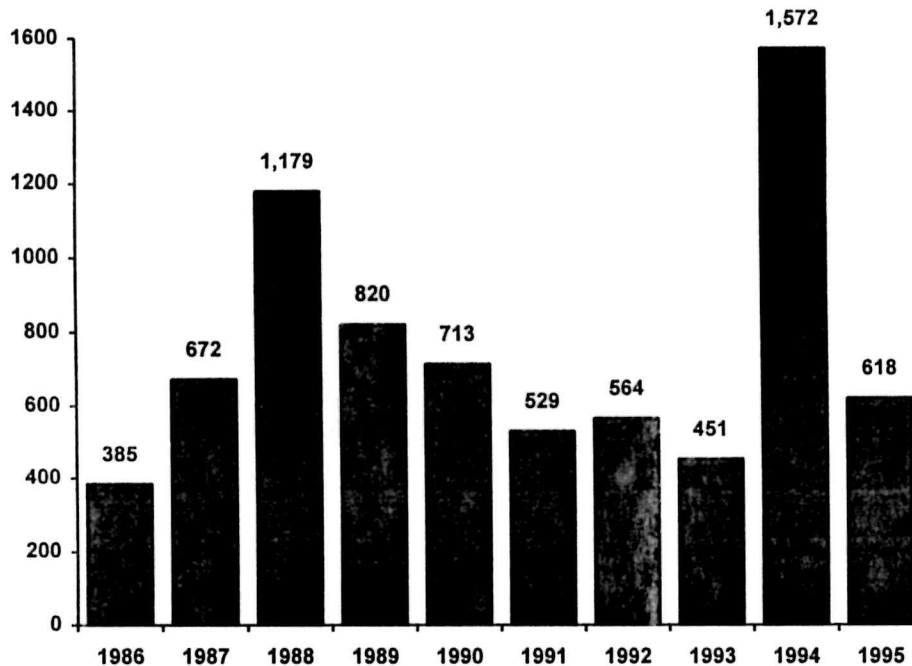


Number of Fires



Number of Acres

NPS SUPPORT ACTIONS, 1986 - 1995



Number of Support Actions

Support actions are primarily wildfire suppression assists to non-local areas. They do not include local mutual aid responses. National mobilizations of National Park Service personnel for interagency wildfire suppression efforts were unheard of until 1985. Since that time many agency personnel, including those whose regular job assignments are not fire-related, have been trained and dispatched to fire assignments.

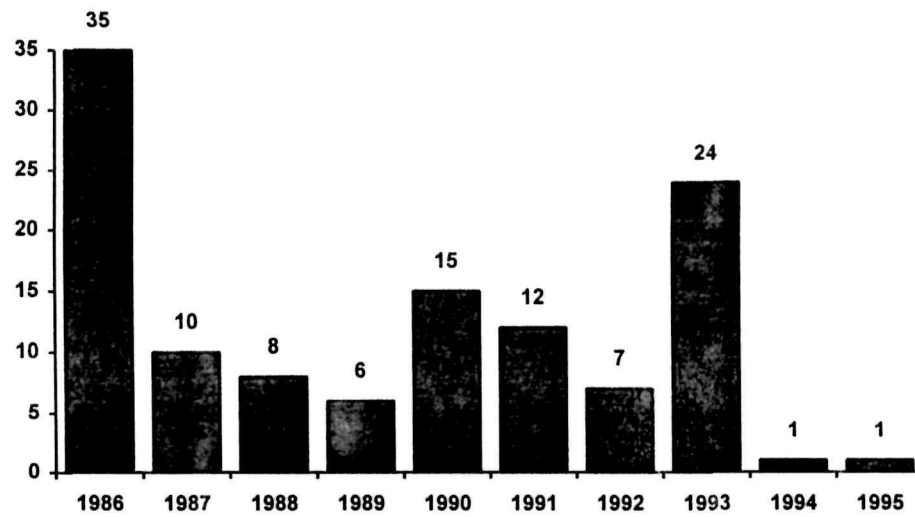
The above graph displays the number of support action dispatches, consequently the actual number of individuals dispatched is substantially greater. These figures do not include people who were involved in mutual aid or local suppression activities, or the people involved in fire-related support positions at their home units. In addition to personnel, NPS helicopters, engines and other equipment are commonly used during mobilizations.

1986 - 1995
FIRE STATISTICS
BY FIELD AREA

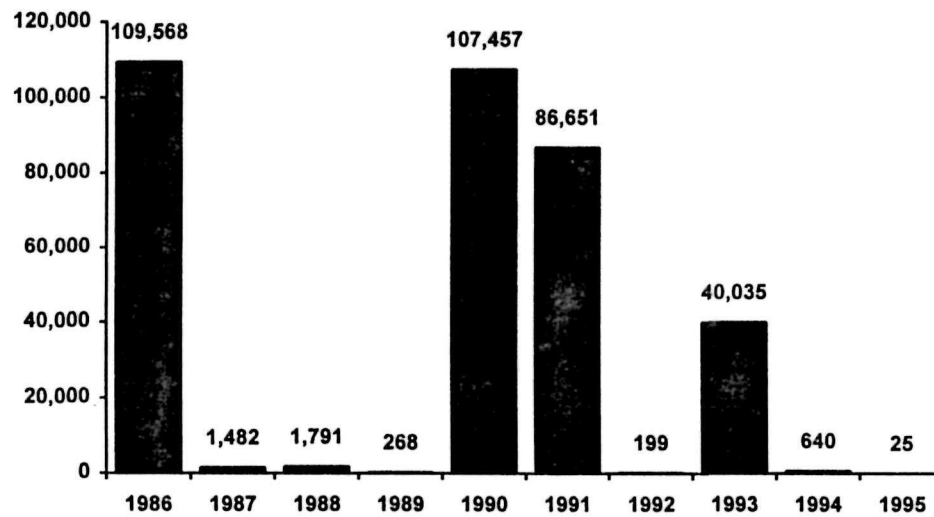


- Whiskeytown-Shasta-Trinity National Recreation Area -

ALASKA FIELD AREA WILDFIRES, 1986 - 1995



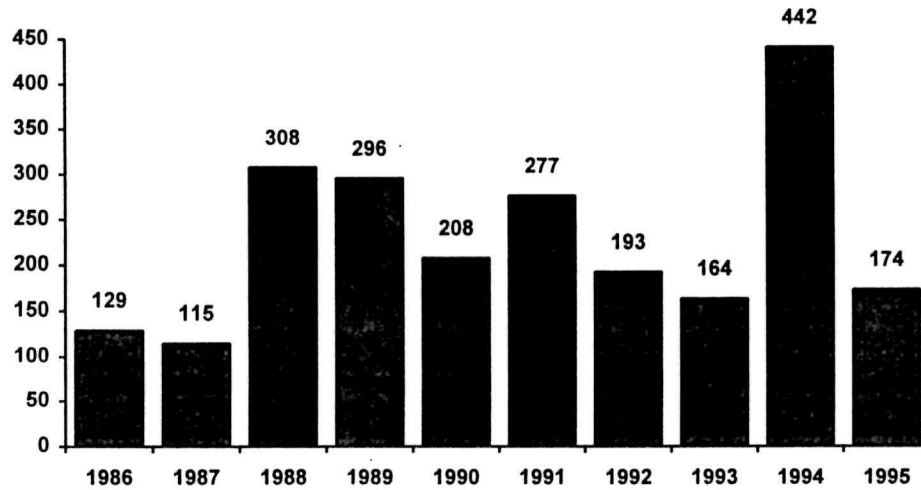
Number of Fires



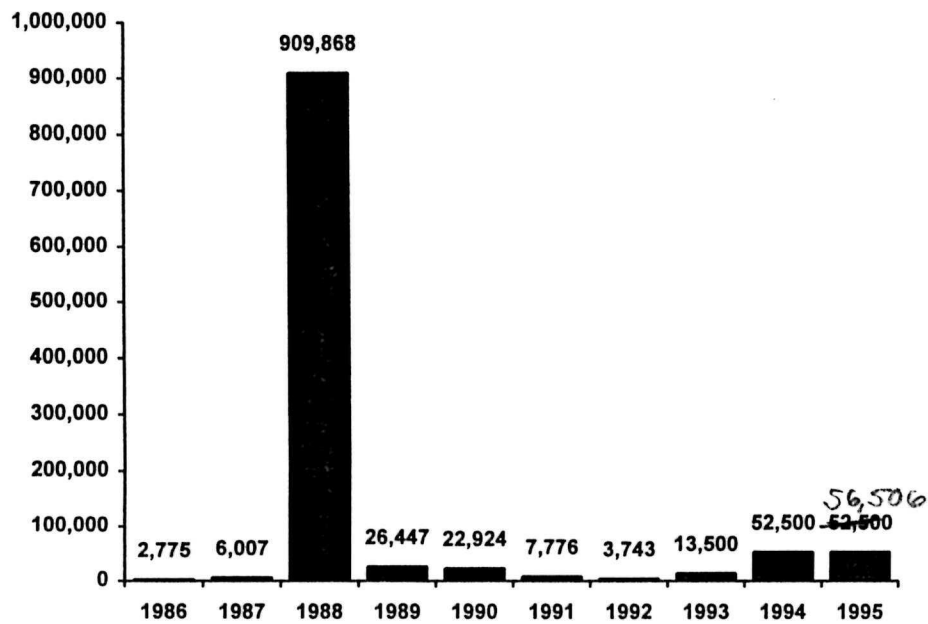
Number of Acres

INTERMOUNTAIN FIELD AREA

WILDFIRES, 1986 - 1995



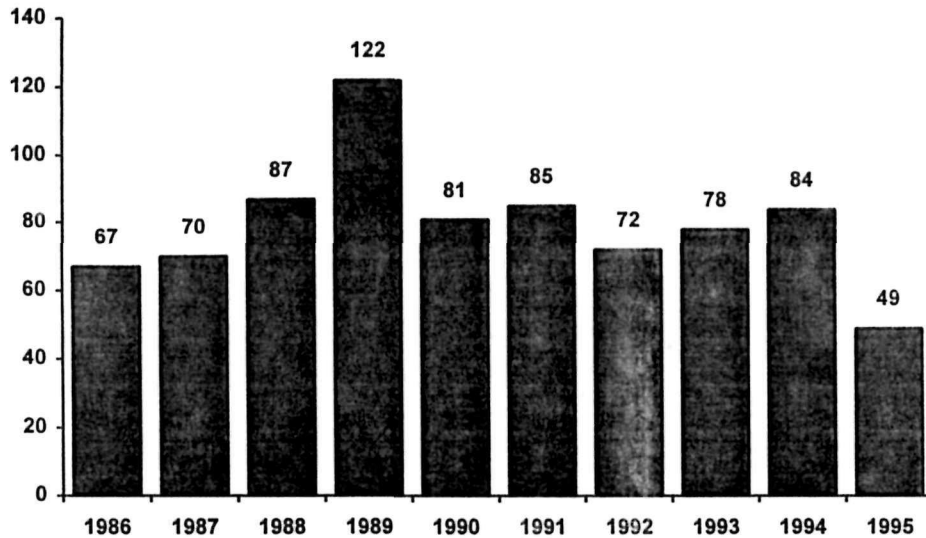
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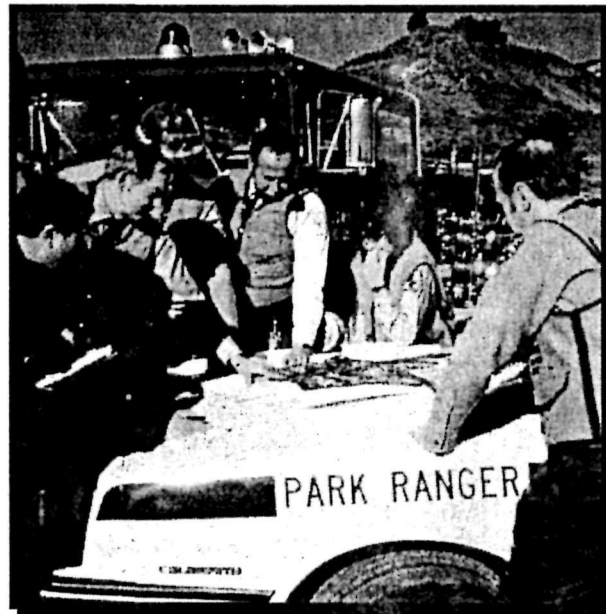
Number of Acres

INTERMOUNTAIN FIELD AREA

MUTUAL AID RESPONSES, 1986 - 1995

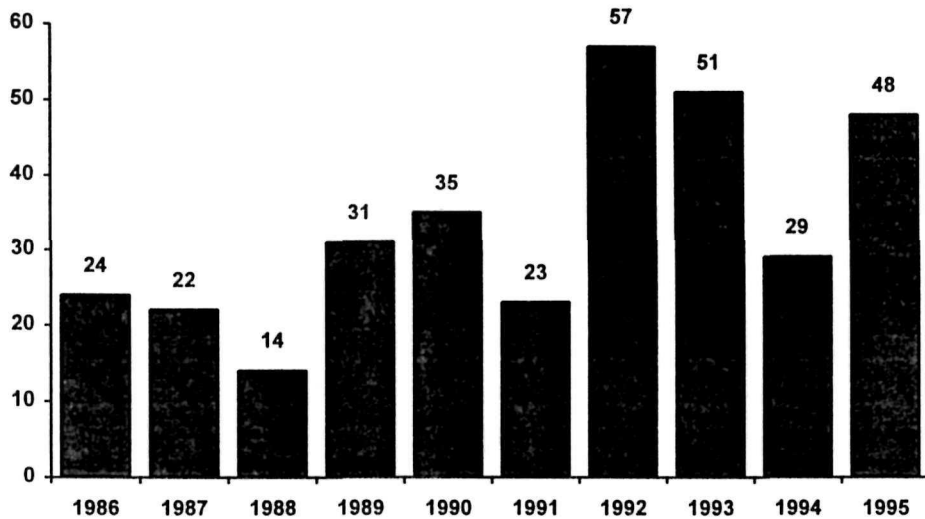


Number of Responses

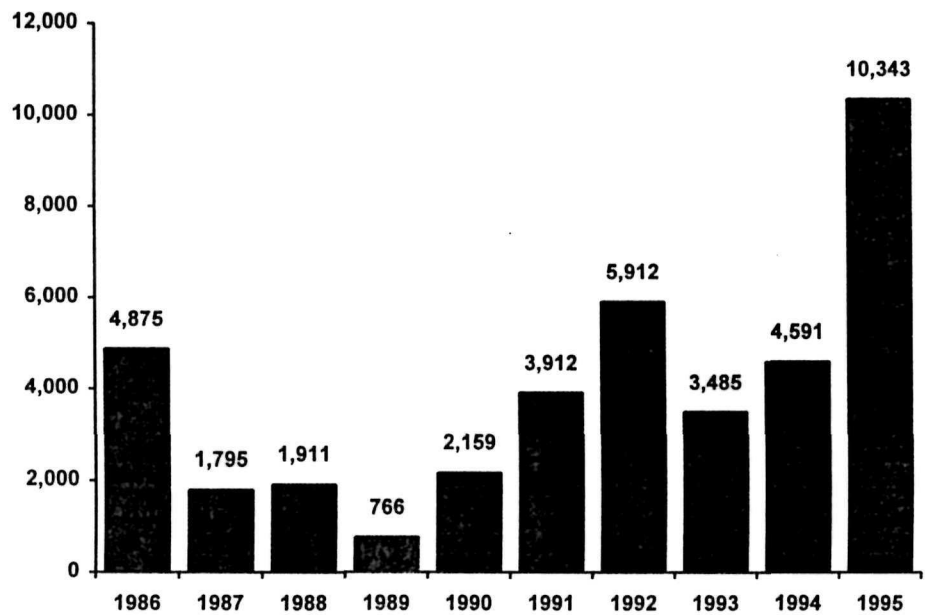


INTERMOUNTAIN FIELD AREA

MANAGEMENT IGNITED PRESCRIBED FIRES, 1986 - 1995



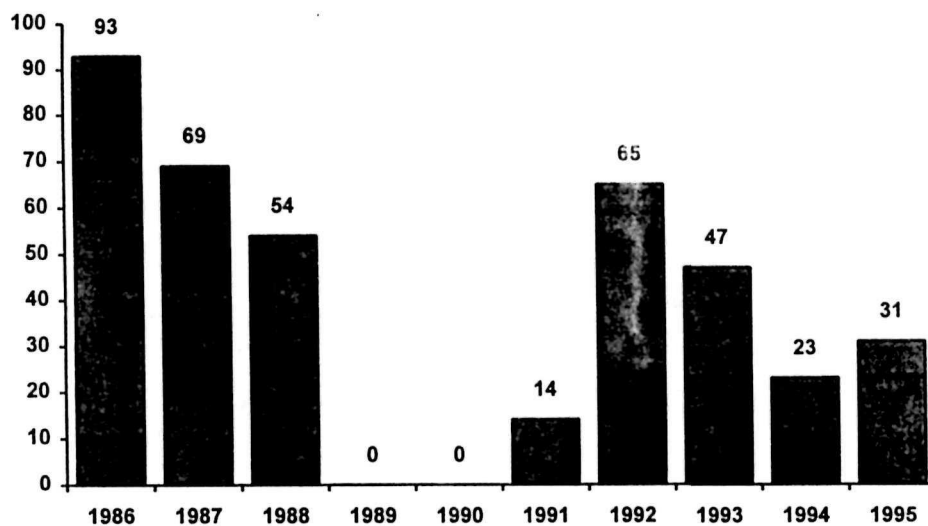
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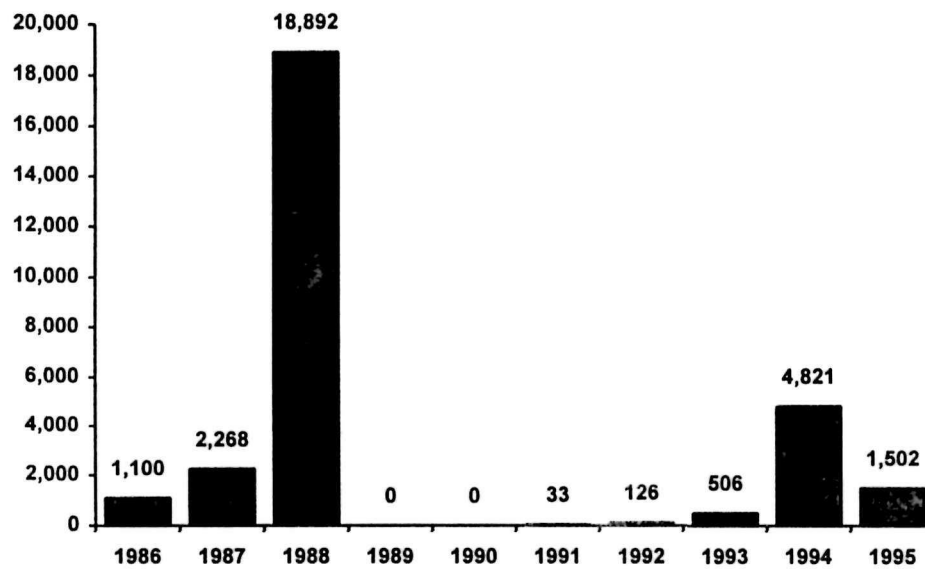
Number of Acres

INTERMOUNTAIN FIELD AREA

PRESCRIBED NATURAL FIRES, 1986 - 1995



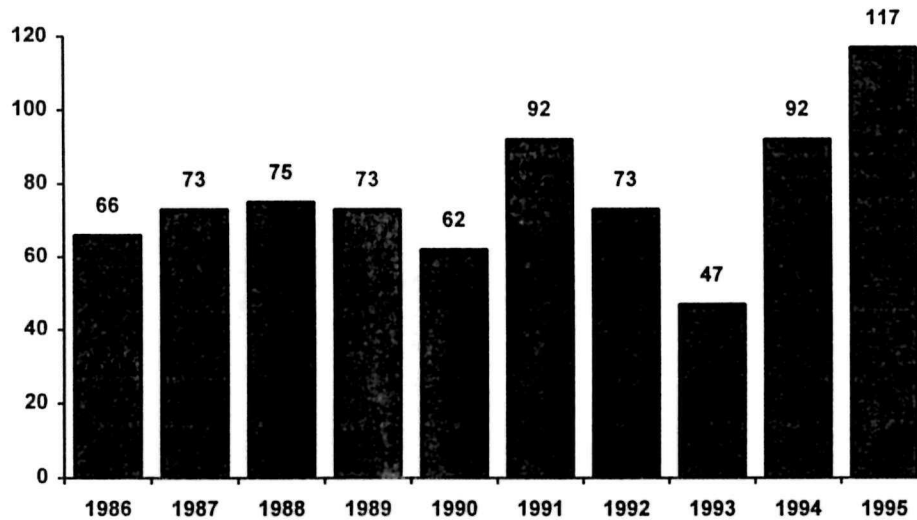
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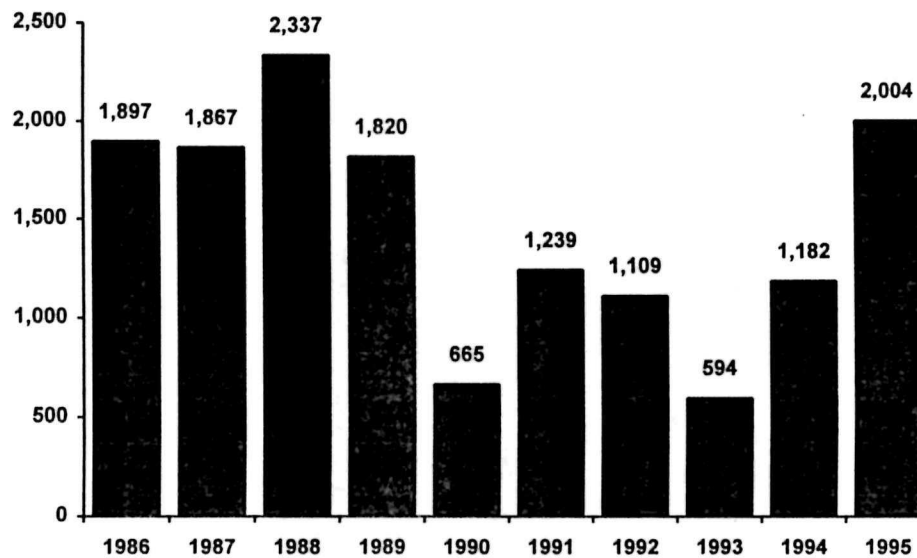
Number of Acres

MIDWEST FIELD AREA

WILDFIRES, 1986 - 1995



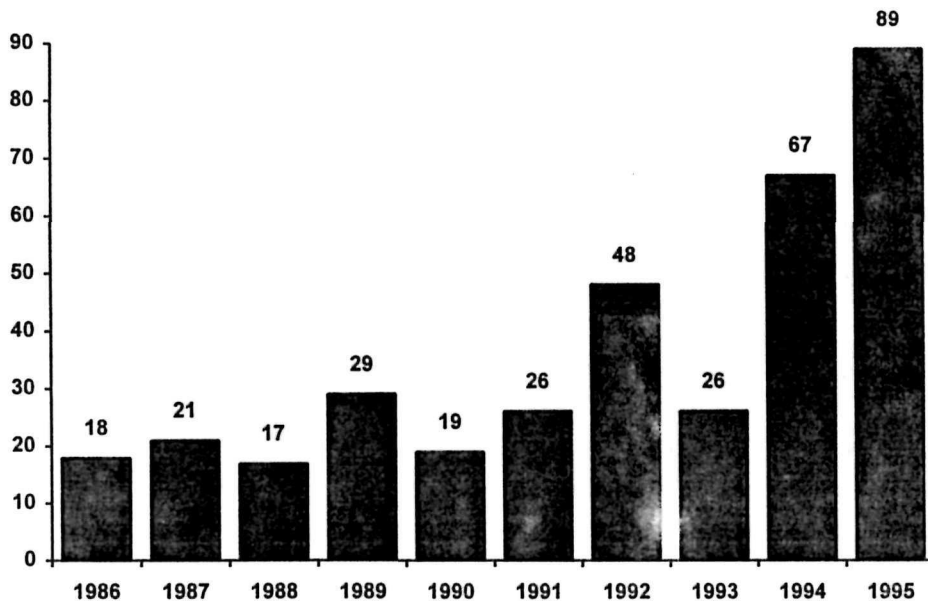
Number of Fires



Number of Acres

MIDWEST FIELD AREA

MUTUAL AID RESPONSES, 1986 - 1995

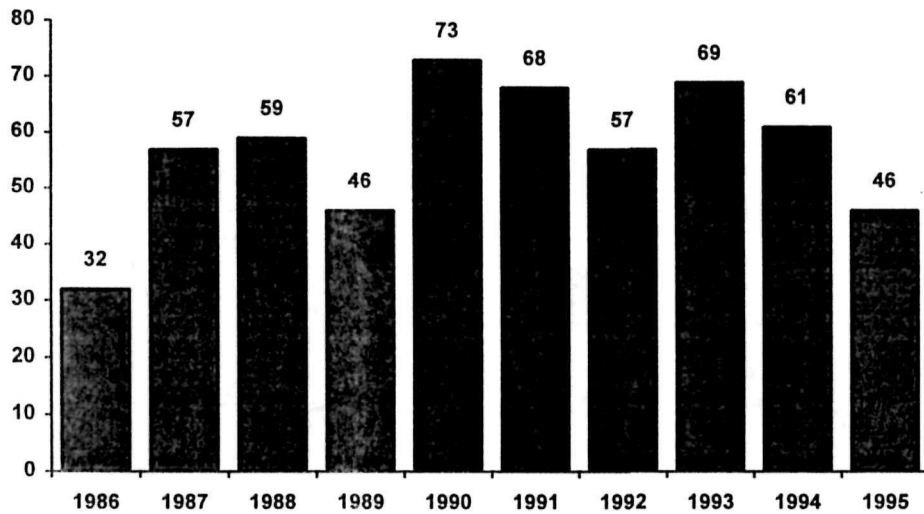


Number of Responses

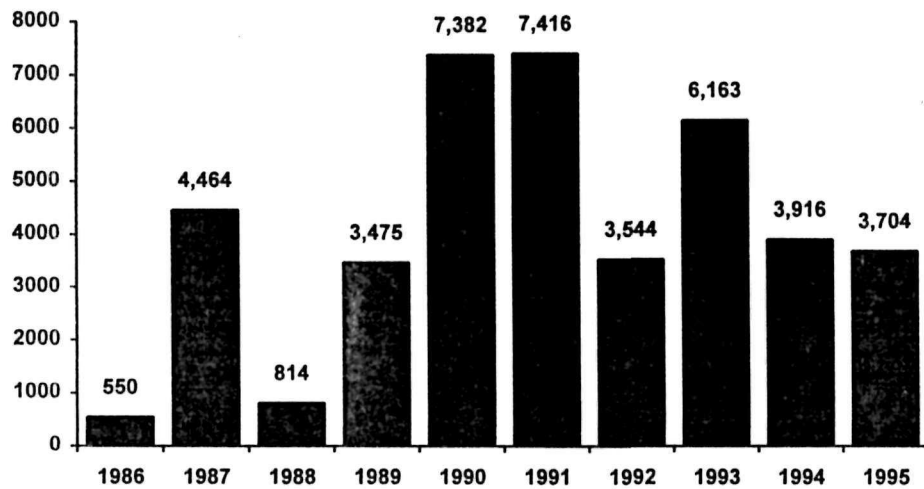


MIDWEST FIELD AREA

MANAGEMENT IGNITED PRESCRIBED FIRES, 1986 - 1995



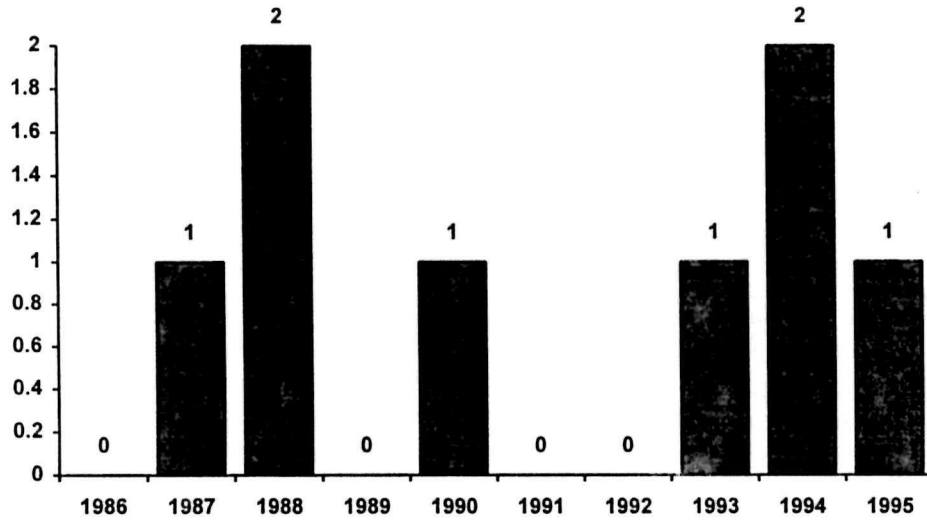
Number of Fires



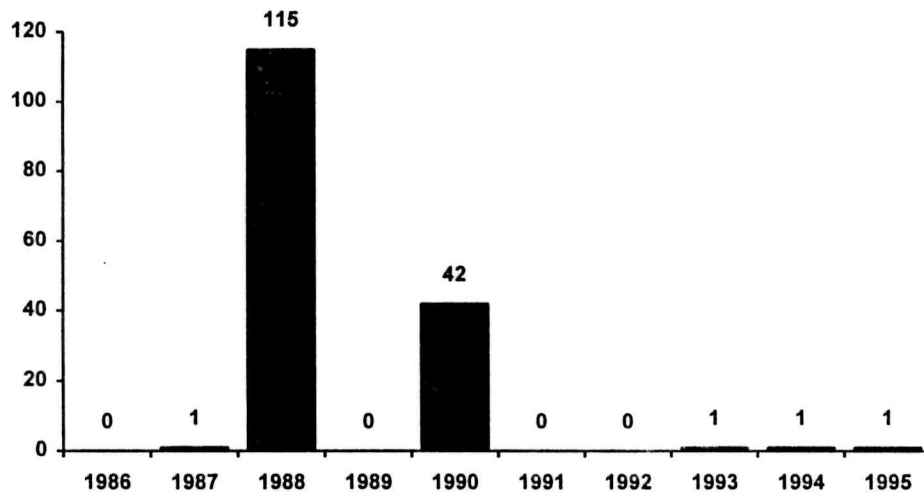
Number of Acres

MIDWEST FIELD AREA

PRESCRIBED NATURAL FIRES, 1986 - 1995



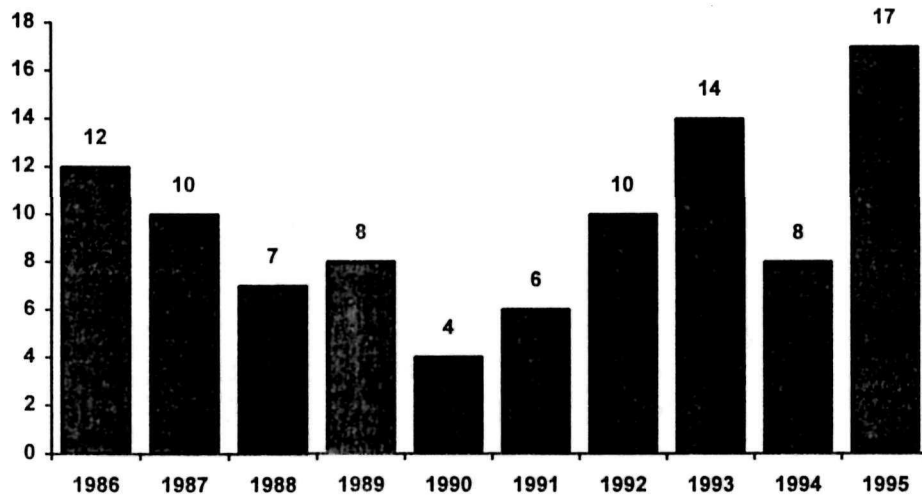
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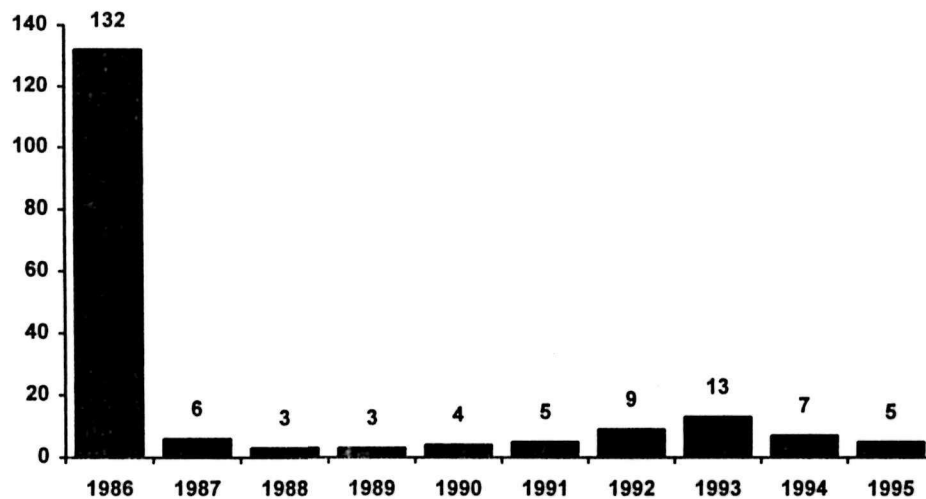
Number of Acres

NATIONAL CAPITAL FIELD AREA

WILDFIRES, 1986 - 1995



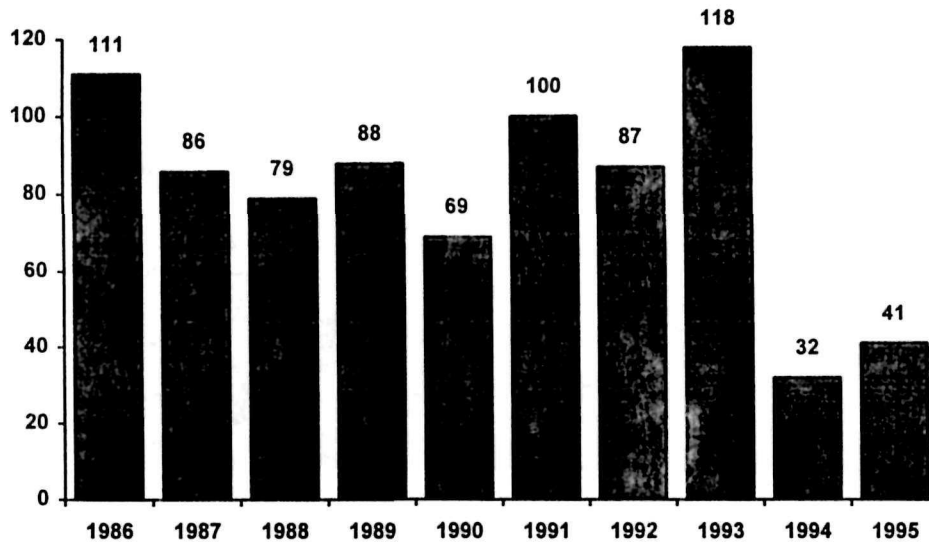
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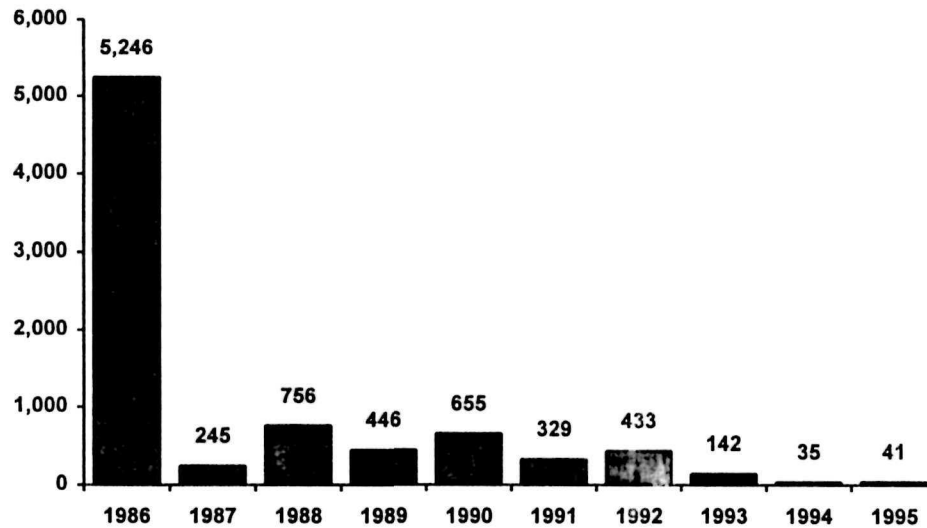
Number of Acres

NORTHEAST FIELD AREA

WILDFIRES, 1986 - 1995



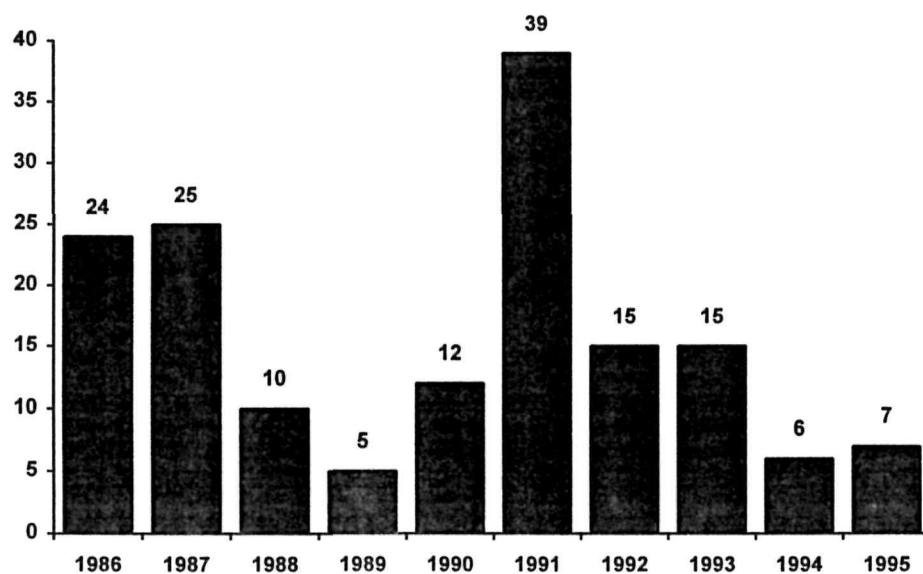
Number of Fires



Number of Acres

NORTHEAST FIELD AREA

MUTUAL AID RESPONSES, 1986 - 1995

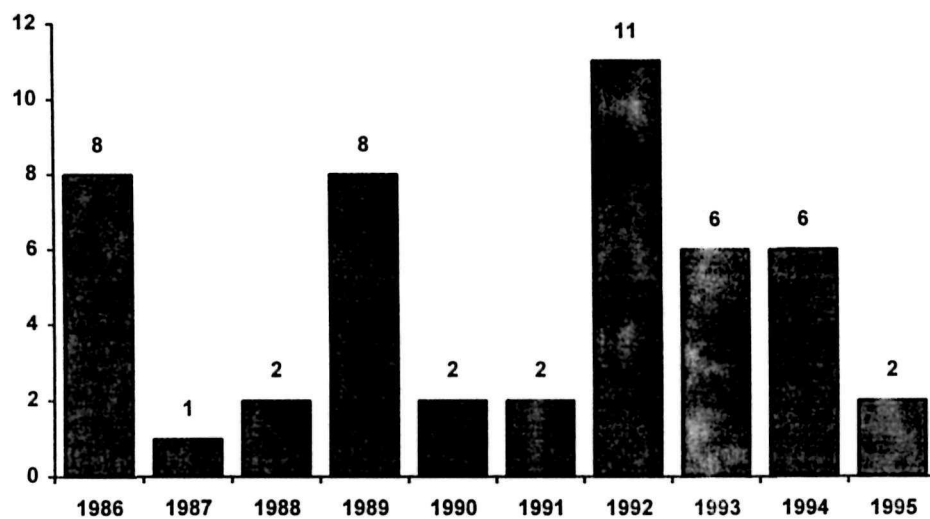


Number of Responses

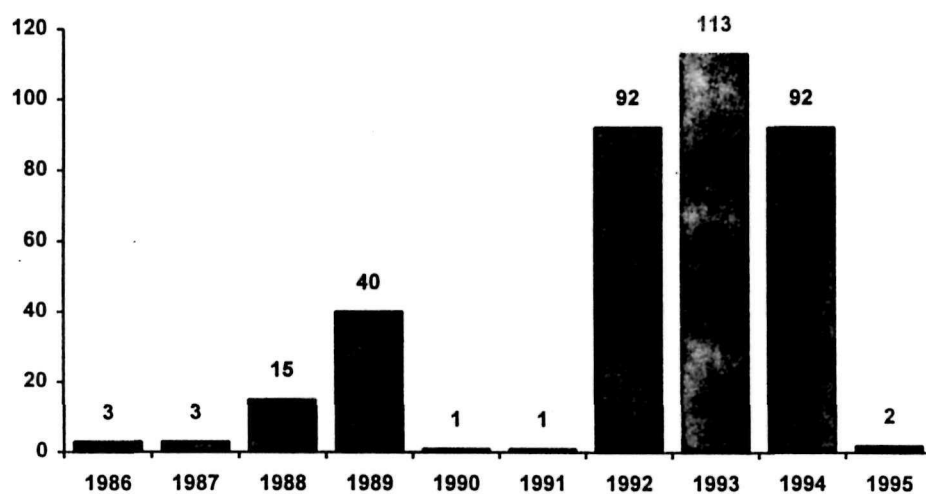


NORTHEAST FIELD AREA

MANAGEMENT IGNITED PRESCRIBED FIRES, 1986 - 1995



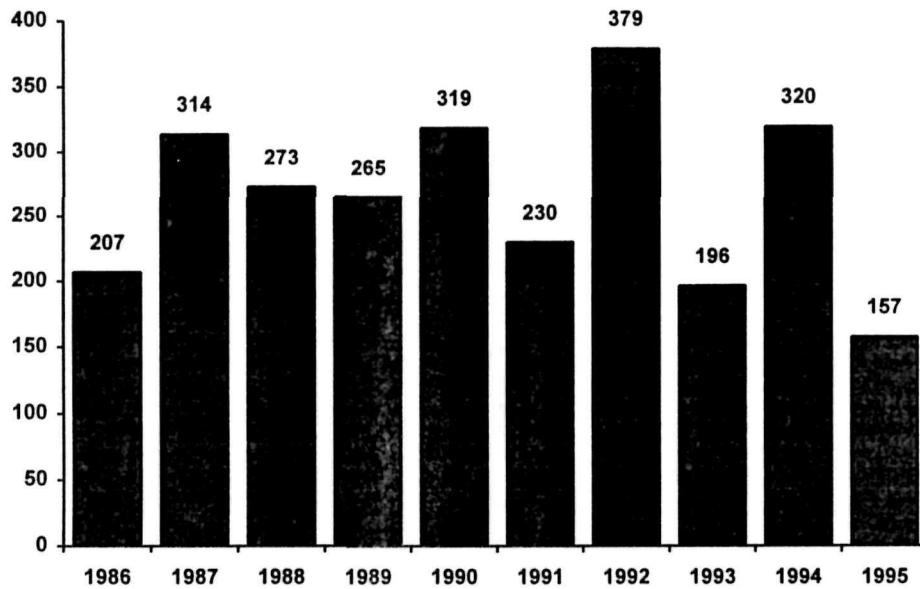
Number of Fires



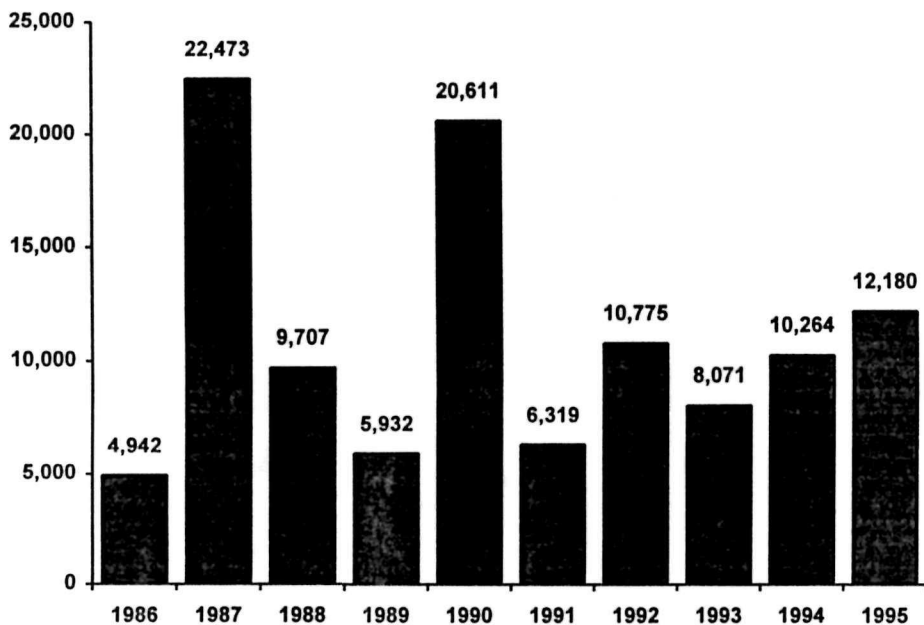
Number of Acres

PACIFIC WEST FIELD AREA

WILDFIRES, 1986 - 1995



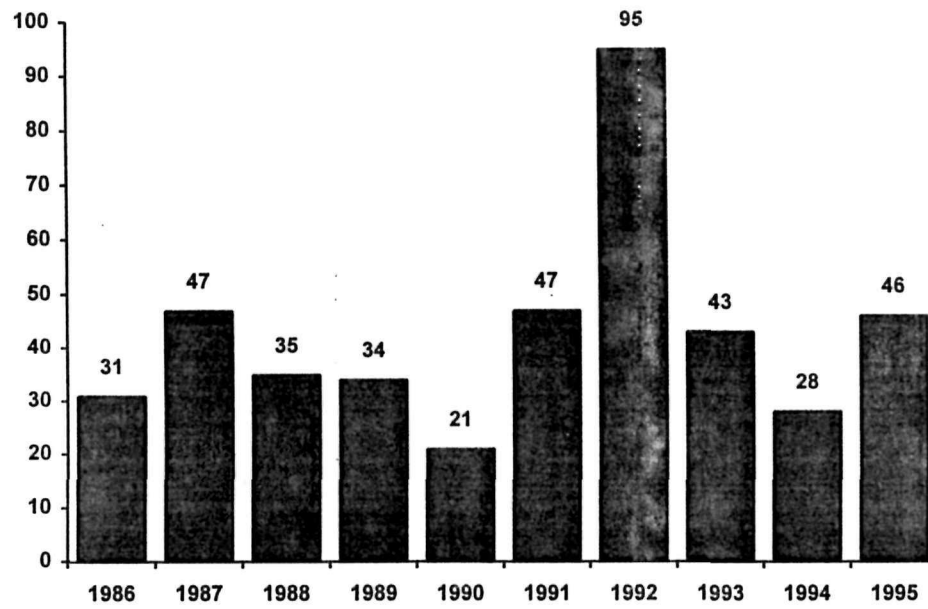
Number of Fires



Number of Acres

PACIFIC WEST FIELD AREA

MUTUAL AID RESPONSES, 1986 - 1995

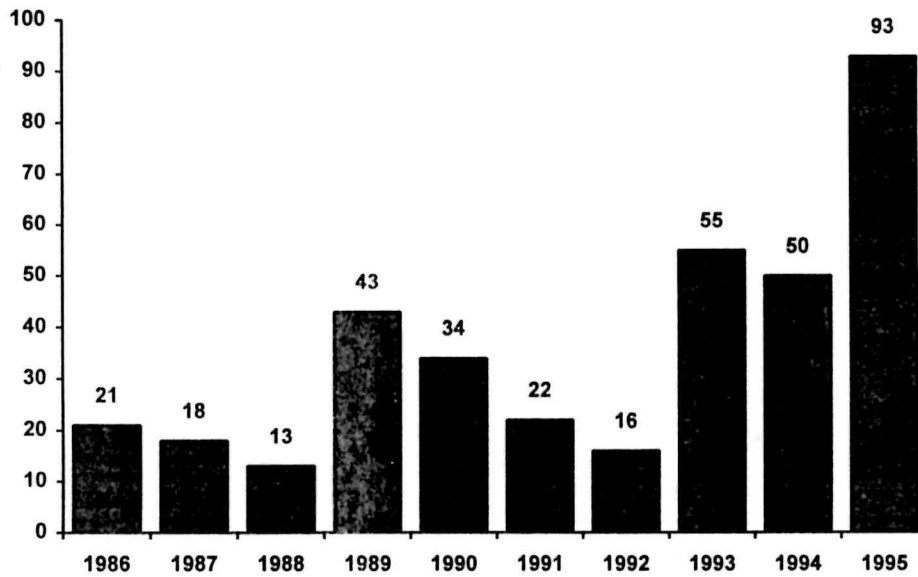


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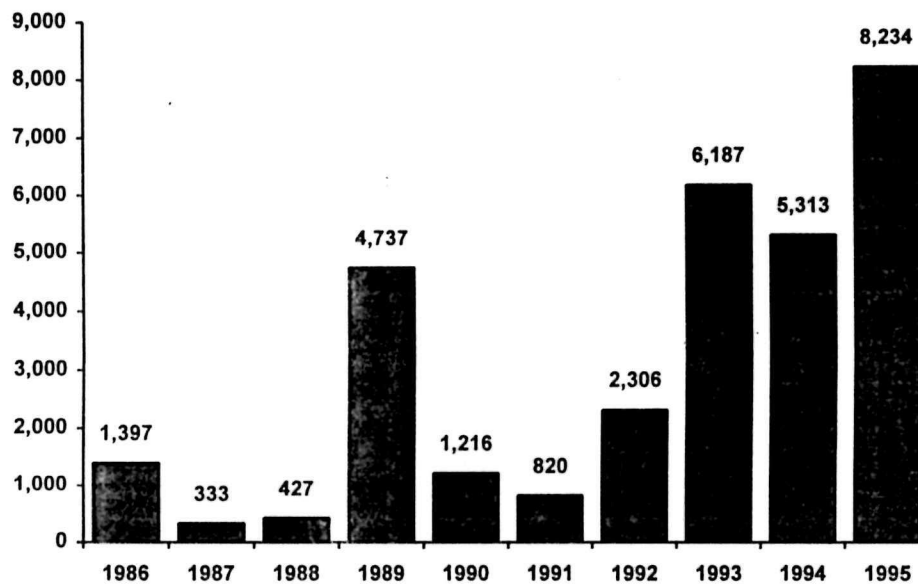


PACIFIC WEST FIELD AREA

MANAGEMENT IGNITED PRESCRIBED FIRES, 1986 - 1995



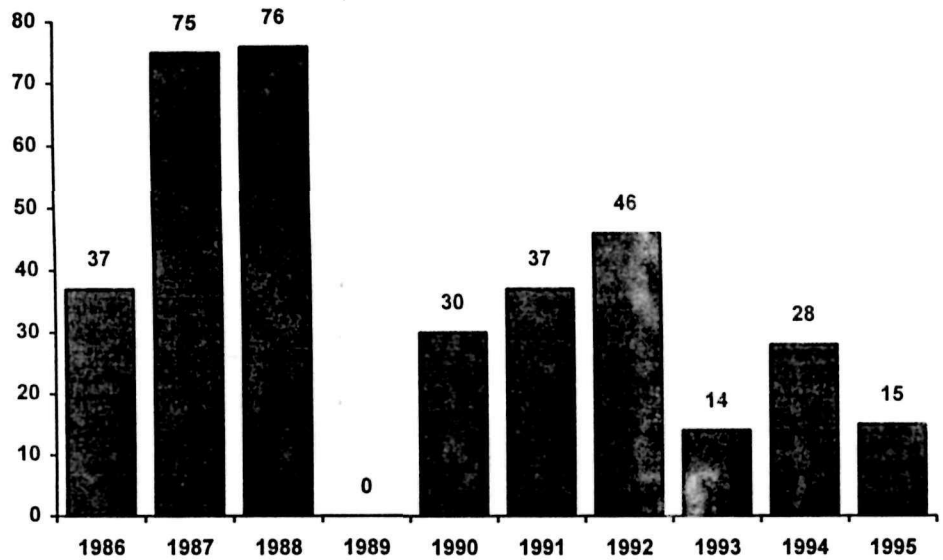
Number of Fires



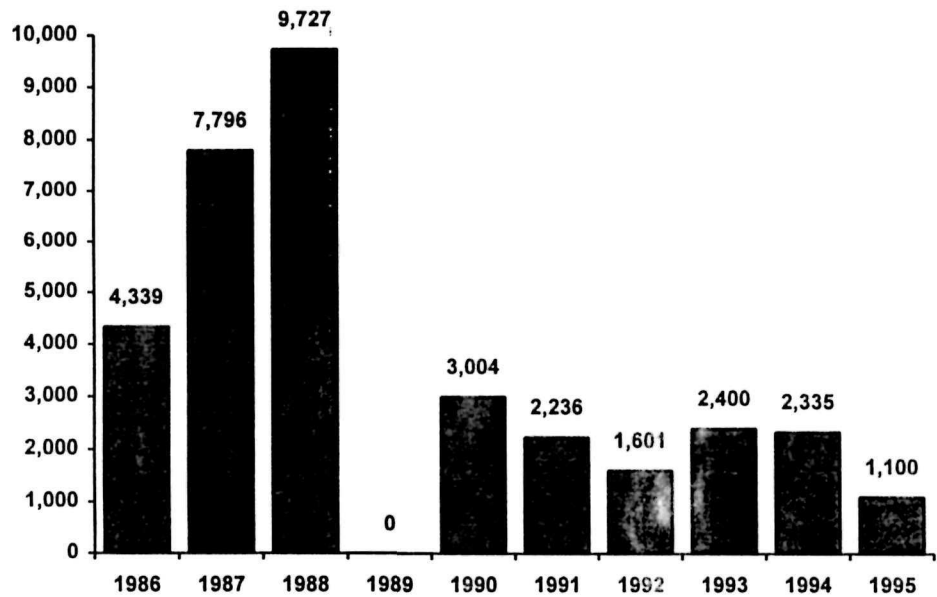
Number of Acres

PACIFIC WEST FIELD AREA

PRESCRIBED NATURAL FIRES, 1986 - 1995



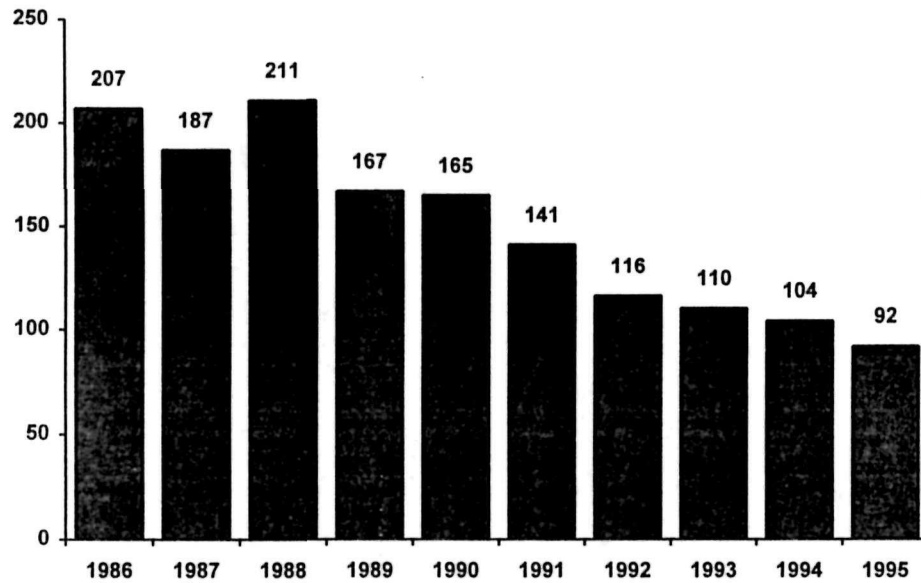
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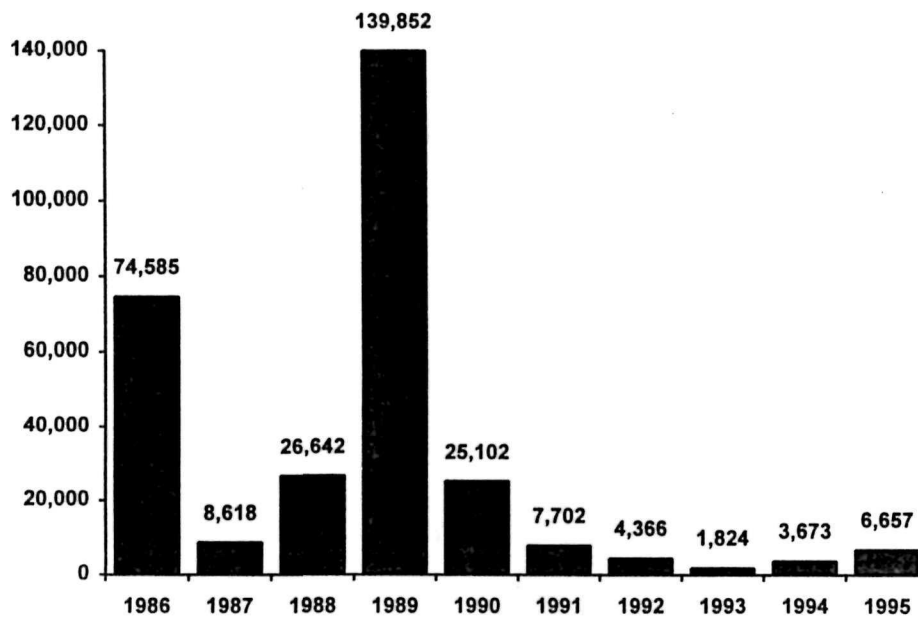
Number of Acres

SOUTHEAST FIELD AREA

WILDFIRES, 1986 - 1995



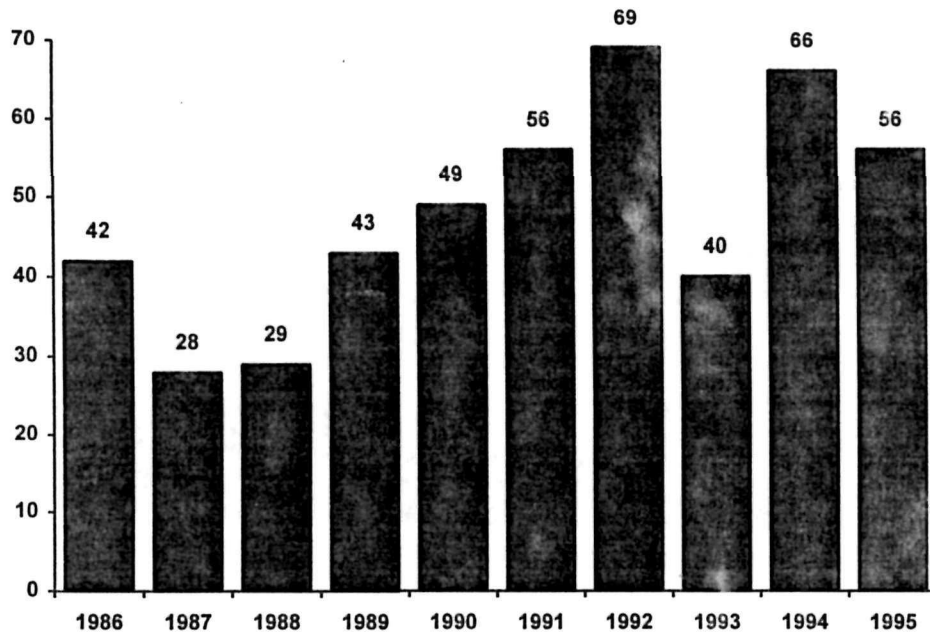
Number of Fires



Number of Acres

SOUTHEAST FIELD AREA

MUTUAL AID RESPONSES, 1986 - 1995

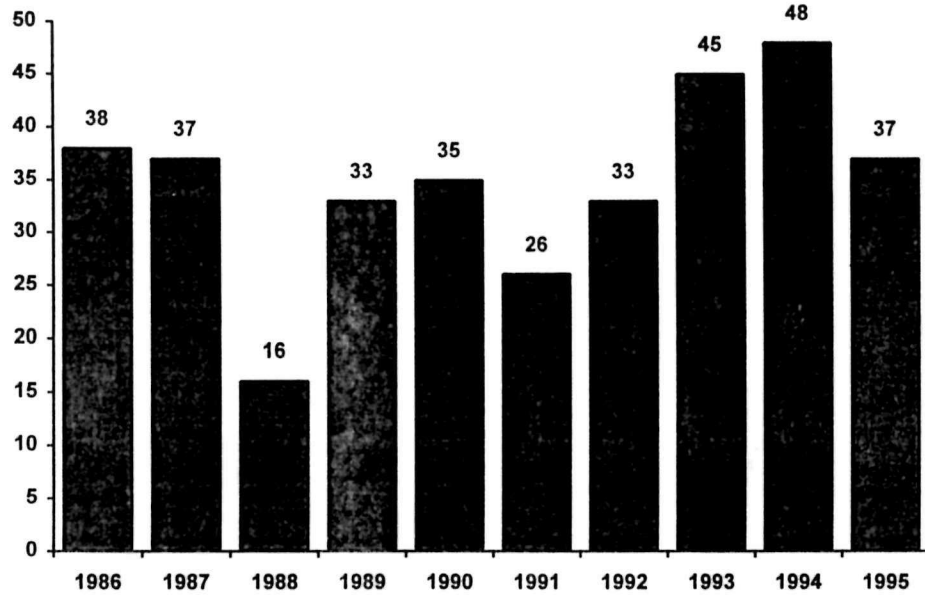


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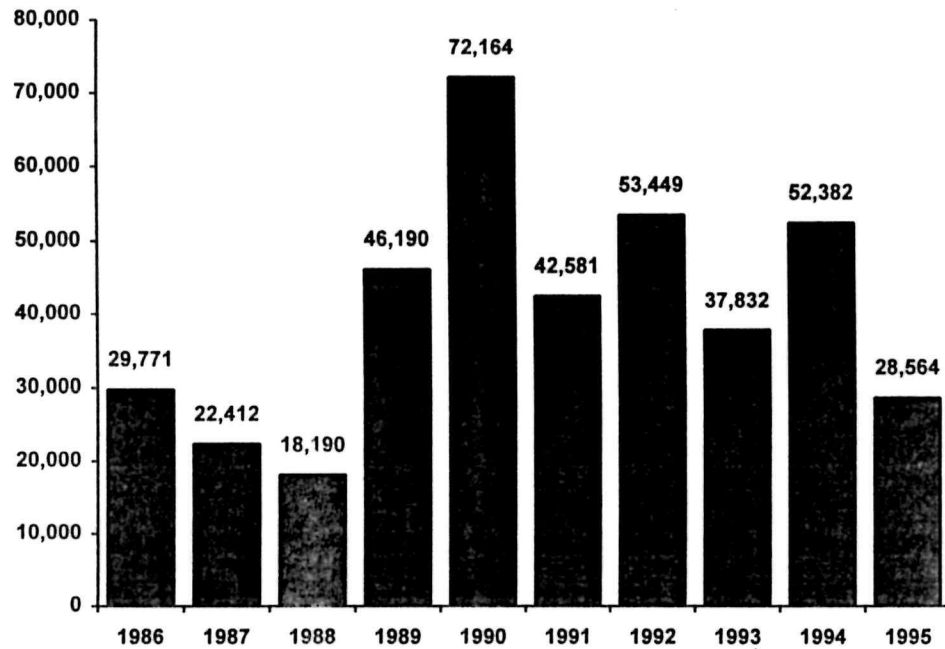


SOUTHEAST FIELD AREA

MANAGEMENT IGNITED PRESCRIBED FIRES, 1986 - 1995



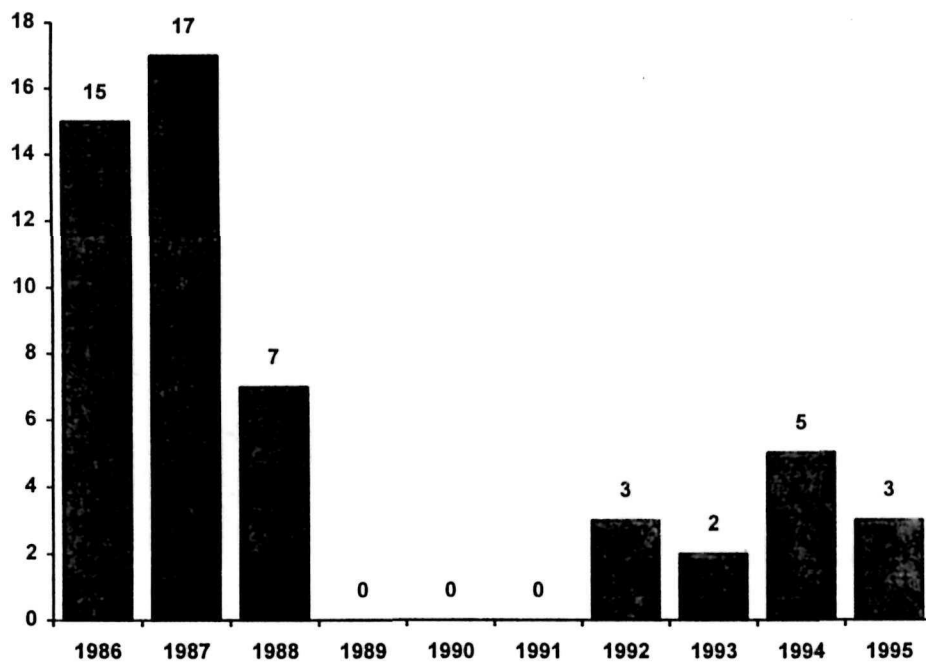
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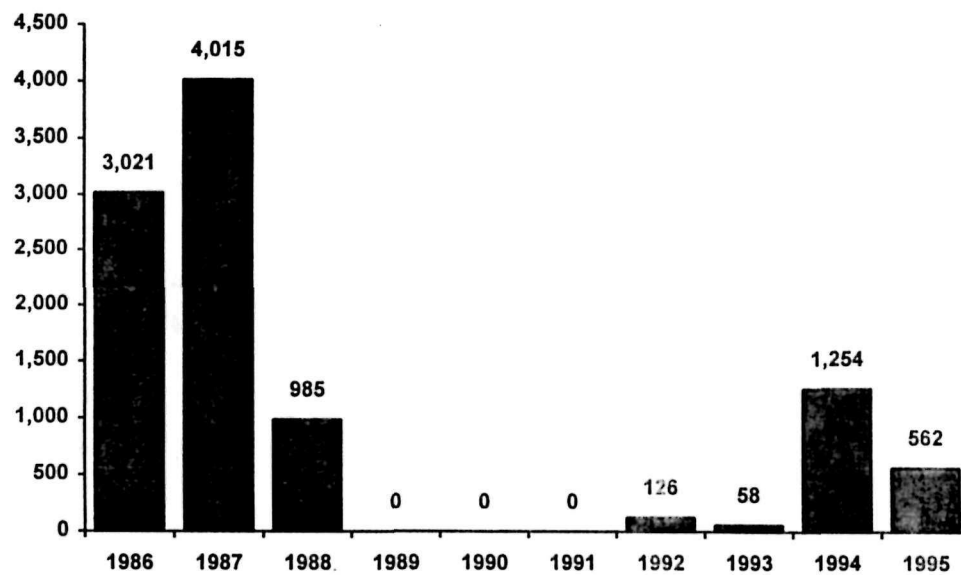
Number of Acres

SOUTHEAST FIELD AREA

PRESCRIBED NATURAL FIRES, 1986 - 1995



Number of Fires



Number of Acres