



USDA  
United States  
Department of  
Agriculture



Forest Service  
Southwestern  
Region

CELEBRATING 100 YEARS OF PUBLIC SERVICE 1905 - 2005



# Kaibab National Forest 2005 Accomplishments



## Forest Supervisor's Message

2005 has been a year full of changes and challenges here on the Kaibab National Forest. We celebrated the 100th birthday of the Forest Service. We reduced the size of our permanent workforce by 10%, or 15 employees, as a result of shrinking forest budgets over the past two years. Major national administrative reorganizations for information technology and financial management have led to new methods of doing business and positions moving to national service centers. Through it all, Kaibab National Forest employees have continued a long tradition of working with all of you, our customers, to provide quality public service and dedicated resource management.

The main focus of our work remains the four great threats to our natural resources: catastrophic fire and the buildup of natural fuels, unmanaged recreation-especially unmanaged off-highway vehicle use, the spread of unwanted and invasive species and the loss of open space. Some of our key achievements in these areas include:

Through a combination of forest thinning, prescribed fire projects and managing fire under our Wildland Fire Use Strategy, more than 28,000 acres across the forest were treated in fiscal year 2005. The Kaibab is gaining a positive reputation for its exceptional and growing Wildland Fire Use program.

Completion of the Noxious and Invasive Weeds Environmental Impact Statement (EIS) last November. The EIS was developed with the Prescott and Coconino National Forests to reduce and control noxious and invasive weed populations. Approximately 1,300 acres were treated; about 800 acres on the Williams district, and over 500 acres on the North Kaibab.

Implementation of a wet weather roads management strategy to reduce resource impacts resulting from vehicle travel during periods of precipitation. We are working with AZ Game and Fish Department and Coconino National Forest to ensure the implementation of road and area closures is coordinated and information we share with our audiences is consistent.

The re-establishment of a Northern Arizona forest products industry gained some ground last year. Southwest Forest Products of Phoenix purchased five timber sales on the Williams Ranger District. The volume of timber provided from these sales is approximately 13.9 million board feet; the trees are mostly

6-12 inches in diameter. SW Forest Products hopes to have their Ashfork pallet mill up and running in February 2006. They're interested in acquiring 15-20 million board feet of timber from northern Arizona forests on a yearly basis, which means we'll be able to thin many more acres on the south end of our forest.

In 2005, the Forest Service celebrated its centennial across the nation. Events were held in many communities that recognized their special ties to the national forests. We held our own special celebration last May to commemorate Forest Service Honor Day. Employees, retirees, volunteers and partners came out to enjoy the spring weather and generous amounts of food and help raise money for the Employees' Association Scholarship Fund. We hope to host the event again next May.

I extend my sincere appreciation to our partners and volunteers. Thank you for the time and effort you invest in the Kaibab National Forest. You made it possible to open one of our campgrounds a month early, allowed us to reconstruct a cattle enclosure fence around a historic cabin, provided assistance with locating, documenting and mapping ancient Puebloan farmsteads, and enabled us to restore an additional 1,000 acres of grassland habitat through our agra-axe program.

I invite you to share your comments and suggestions about our land stewardship and public service programs with our local district rangers and with me. Our phone numbers and e-mail contact information is listed at the end of this report. With your continued support we will accomplish another year of quality public land stewardship.



*Mike Williams  
Forest Supervisor*

A handwritten signature in black ink, appearing to read "Mike Williams".

Mike

# Kudos & Awards

## Rocky Mountain Elk Foundation

The Williams and Tusayan Ranger Districts were honored by the Rocky Mountain Elk Foundation with the “2004 Wildlife Habitat Improvement Award”. The award was given in recognition of more than a decade of work to improve and enhance habitat for elk and other wildlife species on the two districts.

Paul Webber, range management specialist, accepted the honor on behalf of the two districts at the Rocky Mountain Elk Foundation’s national convention in Portland, Oregon, at the end of February 2005. The habitat improvement award is one of four “Elk Country” awards given annually to individuals and agencies who have contributed to conservation, education and stewardship efforts nationwide.

According to the award nomination, wildlife habitat has been deteriorating over the last century because of encroachment by pinyons and junipers in grassland areas. Recognizing this problem, Webber and other forest employees teamed with various individuals and organizations to implement tree-thinning projects – largely using a piece of equipment known as an agra-axe – on public and private lands.

## Site Steward

In recognition of his work in the Williams area, Williams District Archaeologist Neil Weintraub received the Northern Land Manager of the Year Award in 2005 from the Arizona Site Steward Program and the State Historic Preservation Office.

The Arizona Site Steward Program is a statewide organization that works to preserve cultural resource sites by minimizing vandalism through the help of volunteers. Weintraub was honored with a plaque during a ceremony at the Museum of Northern Arizona in Flagstaff April 30, 2005.

*An early ranger uses a portable phone while out in the field around 1911. Photo USDA Forest Service.*



## Rural Communities Fuels Management Partnership

In 2005, the Rural Communities Fuels Management Partnership continued its important work of reducing the risk that wildland fire poses to private property and improving forest health conditions in communities. About 150 acres of private property were thinned in Parks, Sherwood Forest Estates and Williams. That is the most acres ever treated in a year since the partnership was formed in mid-2001. To date, more than 400 acres of private land have been thinned. Last year, about 85 acres were treated.

The partnership’s goal has been to increase the number of acres treated each year, and it more than accomplished that in 2005. The partnership’s efforts were recognized at the national level upon receiving a national USDA Forest Service award for strengthening relationships, improving communities and engaging in natural resource stewardship. The Rural Communities Fuels Management Partnership was a recipient of the 2004-2005 Rural Community Assistance Award in the Leadership Category.

The partnership was recognized for demonstrating exceptional leadership that enabled on-the-ground planning and actions.

Besides working to thin private property, the partnership has also focused its efforts on educating landowners about the

importance of making their property more defensible against wildland fire. Through the project, property owners are educated about their roles and responsibilities in fuels management and forest health. That educational focus was acknowledged in the RCA award citation:

“In the spirit of working together for rural America, the Rural Communities Fuels Management Partnership is recognized for outstanding leadership in education and community involvement through on-the-ground demonstrations to help local communities in northern Arizona improve forest health and reduce the risk of wildland fire.”

For partnership members, the most important part about receiving national recognition like the RCA award is that it will better position the RCFMP to receive grant funding. The partnership’s goal of treating as many properties as possible will only happen through continued grant funding.

In 2005, the partnership donated the treatment of 11 acres to the Pinal County Pine Combs 4-H Camp. The Arizona State Land Department created a fire management plan for the camp and marked the trees for removal. Coconino Rural Environmental Corps and local Youth Conservation Corps crews did the thinning work as a donation



Members of the Rural Communities Fuels Management Partnership - Back row, left to right: Tom DeGomez, Dennis Lund, Cary Price, Art Matthias, Mike Martinez, Aaron Green, Wayne Marx, Joe Reinarz, Steve Best. Front row left to right: Dustin Woodman, Kevin Boness, Kevin Weismann and Jackie Denk.

since the camp’s funding resources are limited.

Participants in the Rural Communities Fuels Management Partnership are the Kaibab National Forest; Arizona State Land Department; University of Arizona – College of Agriculture and Life Sciences; Northern Arizona University’s Ecological Restoration Institute; Coconino County; Arizona Department of Corrections; Coconino Rural Environmental Corps; City of Williams; and Parks-Bellefont, Sherwood Forest Estates, and Williams volunteer fire departments.

# Partners & Volunteers

*Forest Service partners and volunteers made tremendous contributions to a wide range of forest programs and projects. Heritage resources, range, recreation, visitor information, recreation and wildlife programs benefited from the hours of work provided by groups and individuals who believe their support is best demonstrated through action.*



*The North Kaibab District wishes to recognize two special people, Site Steward Program coordinators Ray and Juanita Huber for their supervisory efforts. Ray passed away late last year – he will be missed.*

*Top from left: The Americorp crew takes a break from their trail work on the Tusayan District; second pictures from left: Historic preservation specialist John Azar and Fredonia Youth Conservation Corps member Mike Tait install new roof braces in the Jacob Lake Ranger Station barn; third picture from left: Recreation technicians Becky Douglas and James O'Reilly wire new fence posts for the Jacob Lake Ranger Station corral; Far right on top: The Jacob Lake Ranger Station, constructed in 1910, is one of the oldest ranger stations in the southwest; photo taken in the 1920's. (bottom) Newly renovated, the historic station today is used as an interpretive facility during the summer months.*

## North Kaibab District

The North Zone heritage resources program was one of the biggest beneficiaries of volunteer efforts. 2005 started with a "Passport In Time" project in House Rock Valley, where a diverse group of 15 volunteers joined forest archaeologists in locating, documenting and mapping Puebloan farmsteads, trying to better understand the agricultural and trade patterns of the people who once occupied this now-isolated landscape.

The heritage resources staff, with significant assistance from local historic preservation specialist John Azar, also coordinated the work of a number of groups and individuals – including Coconino County Rural Environmental Corps and Youth Conservation Corps teams, members of the Grand Canyon Historical Society, and individual volunteers – on the renovation of the historic Jacob Lake Ranger Station.

As always, the Arizona Site Stewards contributed greatly to the North Kaibab's heritage resources program. About 20 site stewards worked on the district in 2005, monitoring and documenting the condition of known archaeological sites. Gene Cordero and Wanda Lawrence also earned special recognition for flying over the Kaibab Plateau in their personal plane, conducting visual inspections of archaeological sites.

Finally, Californians Don Christensen and Jerry Dickey returned to the district again this year to record Kaibab Paiute rock art in the Kanab Creek Wilderness.

Turning to rangeland management, several volunteers from the Grand Canyon Trust assisted the district's staff in eradicating noxious weeds from the Slide Elbow area, part of the district's Central Winter grazing allotment.

Volunteers and partners also made a big difference in accomplishing the district's 2005 recreation goals. About 17 volunteers from the Arizona Trail Association turned out over the Memorial Day weekend to assess, repair and improve almost 23 miles of the Arizona Trail

on the northern half of the Kaibab Plateau. In addition to their work on the Jacob Lake Ranger Station, Coconino County Rural Environmental Corps and Youth Conservation Corps teams worked to improve sections of the popular Navajo and Rainbow Rim Trails, and contingents from the Sierra Club and Wilderness Volunteers made their annual trek to the North Kaibab to improve portions of the Jumpup and Nail Trails near Sowats Point.

District visitor information services also benefited from volunteer efforts, with several individuals helping to maintain, repair and staff the Kaibab Plateau Visitor Center and provide interpretive programs at the visitor center, ranger station and campgrounds in the Jacob Lake area.

Members of the Buckskin Chapter of the Arizona Deer Association have been working to better wildlife habitat on the Kaibab Plateau for many years. They returned in 2005 to replace a fence around one of the natural lakes and the grounds of a historic cabin at Three Lakes, which will keep livestock out of the lake and cabin grounds.

Lastly, the North Kaibab Ranger District and Arizona Game & Fish Department began working together in 2005 to design an ambitious habitat improvement project. When implemented, the West Side Habitat Improvement Project will provide increased browse and forage on about 25,000 acres of critical mule deer winter range.

## South Zone

The Williams and Tusayan Ranger Districts' recreation programs received a big boost from volunteers and partners in 2005. An Americorps crew spent eight weeks on the Williams and Tusayan Ranger Districts, maintaining and improving trails on Bill Williams Mountain and reconstructing a nature trail at the Ten X Campground to make it wheelchair accessible. A Coconino County Rural Environmental Corps crew also committed three

weeks to improving a section of the Arizona Trail on the Tusayan Ranger District.

A Coconino County Youth Conservation Corps team put in five weeks of fence work on south zone districts, constructing a wildlife fence at Dead Man Tank, repairing a fence at White Horse Lake and erecting a safety fence around a cinder pit.

The Kaibab National Forest also entered into partnership with the City of Williams and the Arizona Game & Fish Department to rebuild a boat ramp at Dogtown Lake Campground. The project, expected to begin in 2006, will be funded by a Game & Fish grant with city equipment and crews working to demolish the old ramp.

Although it had been years since the Williams area has seen water in local lakes, Kaibab Lake opened a month early for day use in 2005, thanks to the efforts of a group of local volunteers spearheaded by Williams business owner LaDonna Weatherhead. The "Friends of Kaibab Lake" took on maintenance tasks like picking up trash and cleaning and stocking restrooms.

As they have for the last several years, Jim Boyd and friends went into Little Hells Canyon and cleaned up around dispersed fisheries sites. Arizona Game & Fish Department volunteers and members of the Northern Arizona Flycasters Association also cleaned up and posted regulation signs at dispersed fisheries sites.

A group of 12 volunteers from the Williams-Flagstaff area worked as wilderness rangers on the Kendrick Mountain Wilderness, making hikes throughout the summer and fall to educate backpackers, horsepackers and hikers about "Leave No Trace" and Wilderness ethics, clean fire rings and conduct noxious weed inventory and control. Volunteers also contributed to the South Zone's fire management program. Members of the local chapter of the Back Country Horsemen helped pack supplies and equipment into the fire lookout station in the Kendrick Mountain Wilderness throughout the 2005 fire season.

# Heritage Resources



The Heritage Resources team of archaeologists was as busy as ever in 2005, their schedule of consultation, education, preservation and research activities resulted in a full year of accomplishments.

The forest's tribal liaisons met regularly with representatives of the Kaibab Band of Paiute Indians and the Havasupai, Hopi and Navajo tribes to discuss Forest Service projects and their potential impacts on heritage

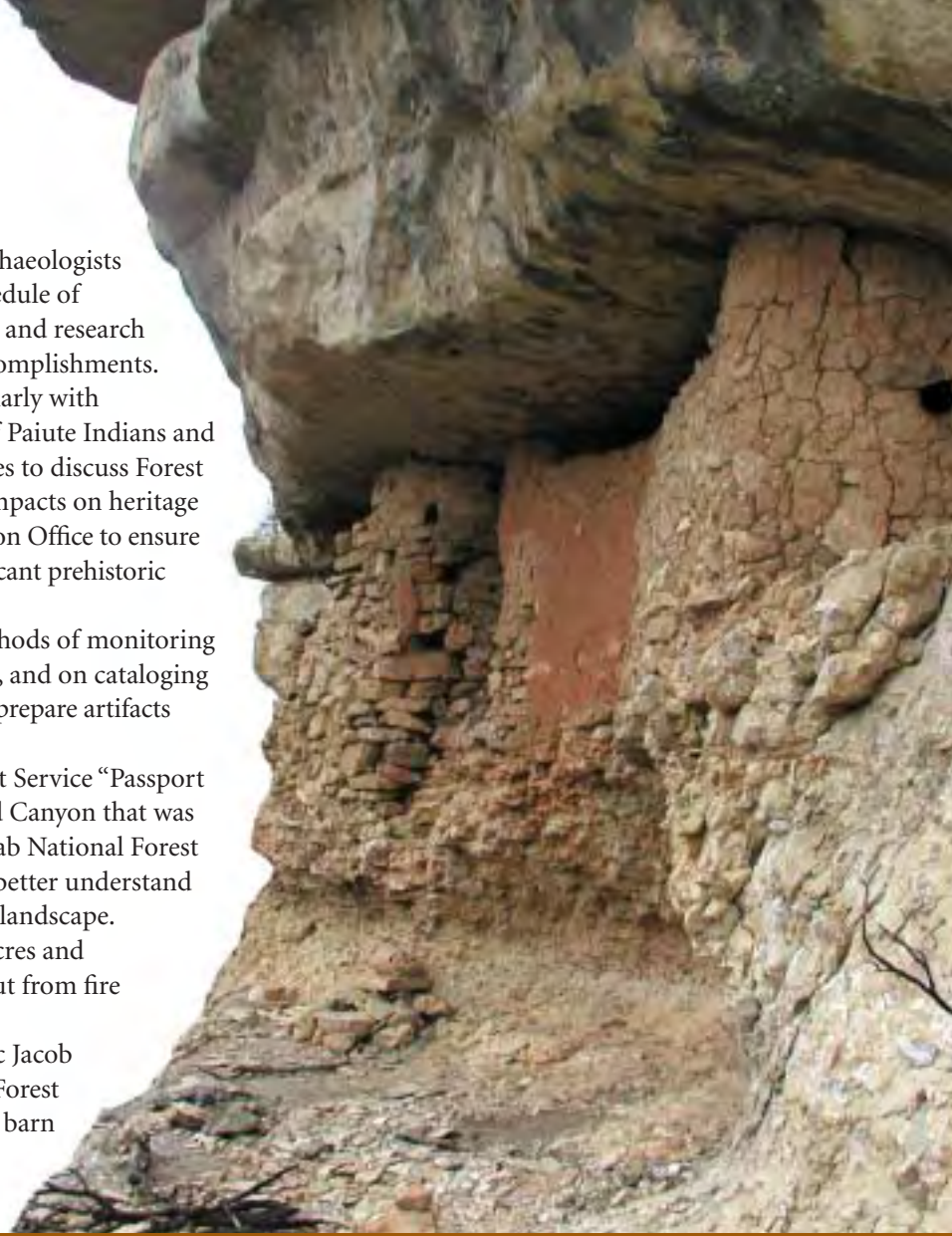
resources. Forest archaeologists also consulted with Arizona's State Historical Preservation Office to ensure compliance with federal and state agreements, and that proposed projects protect significant prehistoric and historic heritage resources.

On the education front, forest archaeologists trained Arizona Site Stewards in methods of monitoring and documenting the condition of known archaeological sites on national forest lands, and on cataloging artifact collections. Using this knowledge, the northern Arizona group helped the forest prepare artifacts for proper curation.

During the first week of October, the North Kaibab Ranger District hosted a Forest Service "Passport In Time" project in House Rock Valley, a remote area along the north rim of the Grand Canyon that was once home to the ancient Pueblo people. A diverse group of 15 volunteers joined Kaibab National Forest archaeologists in locating, documenting and mapping Puebloan farmsteads, trying to better understand the agricultural and trade patterns of the people who once occupied this now-isolated landscape.

With regards to preservation, the Heritage Resources team surveyed over 13,500 acres and documented over 100 new sites in support of over 60 forest projects, running the gamut from fire suppression to road construction to wildlife habitat improvement.

Probably the biggest preservation project of the year was the restoration of historic Jacob Lake Ranger Station on the North Kaibab Ranger District. Funded in part by a \$14,000 Forest Service Centennial Service grant from Congress, the project returned the station's cabin, barn and grounds to their original condition and added interpretive exhibits about life on the Kaibab Plateau in the early 1900s



Above Photo: Forest Service archaeologists and Passport in Time volunteer archaeologists pose for a group photo at their base camp.

## Centennial Highlights

We engaged in a number of activities that celebrated the Centennial and paid recognition to the contributions of our volunteers and partners, and past and current Forest Service employees. Some of our activities included hosting a special screening of the Forest Service's two-hour documentary "The Greatest Good" in Kanab, Utah, organizing a forest clean-up day in the Williams area for forest employees and community volunteers, and holding a potluck and dessert auction with volunteers and current and retired Kaibab employees to commemorate Forest Service Honor Day.

### Folklife Festival

In summer of 2005, Kaibab employees Angie Bulletts and Neil Weintraub participated in a once in a life time opportunity. They traveled to Washington, D.C. to participate in the 39th Annual Smithsonian Institute's Folklife Festival, held annually on the National Mall and visited by more than 1 million people.

Because 2005 marked the centennial of the Forest Service, the agency was invited to participate. According to the Folklife Festival website, the Forest Service program showcased "the occupational traditions of the USDA Forest Service on the occasion of its 100th anniversary." Festival participants represented "the wide range of skills, experiences, and traditions of the Forest Service's

37,000 workers and the communities they serve." By participating in the festival June 23 through June 27 and June 30 through July 4, Weintraub and Bulletts helped to increase visitors' understanding of and appreciation for the country's natural resources and those who care for them.

More than 500 applicants from the Forest Service were submitted to festival organizers for review and final selections. Only about 100 employees were invited to participate.

### Jacob Lake Centennial Celebration

A large number of district partners and volunteers assembled at the partially-renovated ranger station in June to help celebrate the Forest Service centennial. Coconino County District 1 Supervisor

Carl Taylor and Grand Canyon National Park North Rim Unit Manager Phil Walker made presentations at the opening ceremony, and Grand Canyon National Park Ranger Stu Whipple appeared as a 1920s forest ranger.

An encampment of mountain men reenactors from across Arizona told visitors about the tools and techniques of primitive living, while Glendora Homer, a member of the Kaibab Band of Paiute Indians, displayed traditional Native American crafts. Meanwhile, John Olsen of Apple Valley, Utah, and John McParland from the Grand Canyon National Park demonstrated the art of flint napping – making arrowheads and other primitive tools using only natural materials.



Top Row – left to right: Fleet manager Tom Hooker takes pride in caring for the 1925 Dodge Brothers truck.

Retired Kaibab Forest employees, Hiram "Doc" Smith and Carl Winslow participated in the Forest Service Honor Day picnic held in May 2005.

Forest employees and volunteers helped themselves to a potluck lunch held at Kaibab Lake to recognize the contributions from our volunteer groups.

Bottom Row – left to right: Angie Bulletts demonstrates at the 2005 Smithsonian Institute's Folklife Festival how she constructs a cradle board using materials she gathers in the forest.



Williams District archaeologist Neil Weintraub talks to visitors at the 2005 Smithsonian Institute Folklife Festival about the prehistoric and historic heritage resources on national forest lands.

Flanked by Kaibab employees Cathie Schmidlin and Darla Quick, Friends of Kaibab Lake were honored for their contributions, which made it possible to reopen this popular recreation site one month early for day use.

*Kendrick Mountain lookout  
Robin Rose sweeps the area  
for wildland fires.*

# FIREMAN

## Suppression

Even though we have come to see fire not as an enemy but rather as a force of nature critical to the health of our forests, there are still times when suppressing fire is necessary. Specifically, fire is suppressed when it threatens lives or property or has the

potential to because of weather and fuel conditions.

In 2005, firefighters suppressed 123 fires on the Kaibab National Forest. A total of about 813 acres was burned by these wildland fires. That was the fewest wildland fires in several years on the Kaibab. In 2004, firefighters suppressed 266 fires – more than double the 2005 total.

The lower number of wildland fires in 2005 was likely due to two factors: the weather and people. Increased precipitation in fall and winter led to forest fuels having higher moisture levels. Thus, even when an ignition source was present, fires didn't start as easily. Also, people continued to exercise caution with fire while recreating in the woods. Of the 123

## Fuels Management

Fuels management continued to be a top priority for forest managers in 2005. A total of 28,704 acres were treated on the Kaibab National Forest through thinning, prescribed burning, wildland fire use and other fuels treatments. Excluding wildland fire use, the treated acres totaled 19,281.

About 8,433 acres were treated with prescribed fire. Prescribed fire treatments included underburning, in which fire is used to remove the buildup of fuels on the forest floor, and pile burning, in which fire is used to burn stacks of trees and limbs that resulted from thinning projects. About 10,848 acres received mechanical treatments, which included thinning, piling, and the use of a large mower to remove sagebrush.

Forest managers are increasingly focusing their fuels management efforts in the wildland-urban interface (WUI), the areas where forest and communities meet. For example, firefighters on the Williams Ranger District used prescribed fire to treat a hill just to the southwest of the City of Williams in October 2005. The goal of the 200-acre Clover High Burn was to reduce materials on the forest floor that could fuel a high-intensity wildland fire. Areas south and west of communities are of particular concern to fire managers because in the southwest region prevailing winds are typically from the southwest. If a fire were to start south or west of a community, prevailing winds would push the fire directly toward the community. That is why areas south and west of communities are often prioritized for treatment over other areas.



*Kaibab helitack crew prepare for a prescribed burn using aerial ignition.*

Another reason for the increased focus in the WUI is the direction contained in Community Wildfire Protection Plans (CWPPs). These plans basically provide direction from communities to land management agencies on how, when and where fuels reduction projects should take place. The greater Williams community recently established a CWPP that emphasized the importance of accomplishing fuels reduction work in the WUI.

With an increasing focus on the WUI, local community members are also increasingly noticing the products of fuels reduction work. People may notice thinning taking place near their subdivisions and the resulting piles that might be left for a year or more. Slash cut during thinning projects is piled and then usually left until it has dried out enough to be burned. Even after it is dry enough to burn, fire managers have to wait for the right weather

conditions before igniting the piles. Thus, the piles may be present for a period of months to years.

Another product of fuels reduction work that is highly visible to community members is smoke. During the Mudersbach Wildland Fire Use Fire, which burned actively for several weeks, smoke was visible from Tusayan for the duration of the fire and even moved into Tusayan on a few days. During the Clover High Burn, smoke settled into Williams for about two days.

Forest managers recognize that while the end results of fuels management treatments – such as healthier forests and reduced wildland fire risk – are desirable, sometimes the initial products of such activities – such as smoke – are not. They are committed to working to reduce negative impacts while still achieving the positive end results.



# ACCOMPLISHMENTS

fires in 2005, only 17 were person-caused. That was the lowest number of person-caused fires in several years on the Kaibab.

One complex of fires accounted for the majority of acres burned by wildland fire in 2005. The Ridge Complex on the North Kaibab Ranger District burned about 730 acres. The Ridge Complex was

made up of six fires in the vicinity of Jacob Lake. The largest and most active of the six fires was the Nail Fire, which was about three miles north of the Big Springs Field Station. The complex was started by lightning on July 15, 2005 and was fully contained in a week.

	2001	2002	2003	2004	2005
Total No. Wildland Fires	246	147	193	266	123
Total Acres Burned	1664	5857	95	789	813
Person-Caused Fires	45	35	24	27	17
Person-Caused Acres	1228	123	14	344	59



## Wildland Fire Use

The Kaibab National Forest's wildland fire use program grew substantially in 2005. In fact, about 71 percent more acres were treated with wildland fire use in 2005 than in 2004. About 5,500 acres were treated in 2004 compared to 9,423 acres in 2005.

The wildland fire use strategy allows some lightning-caused fires to burn under specific conditions and within a predetermined area for resource benefits. Before August 2000 when the Kaibab National Forest began allowing wildland fire use, all fires – whether started naturally or by people – were suppressed.

Some of the specific resource benefits achieved by the 2005 wildland fire use fires were a reduction in the buildup of dead forest debris; the creation of more open stands of trees leading to an increase in the growth of grasses and forbs used by wildlife; and, a decrease in the risk of high-intensity wildland fire.

One fire accounted for the majority of acres treated last year under the wildland fire use policy. The Mudersbach Fire was discovered June 23 on the Tusayan Ranger District. Fire managers made the decision to put it into wildland fire use status because they felt it could benefit resources, and it did not pose a threat to lives or property.

The Mudersbach Fire burned actively for several weeks and treated 7,790 acres. It was a good demonstration of how fire behaves when it is allowed to actively function as an ecological process.

In many areas, the fire treated the land with a low-intensity burn. In other areas, it was at a moderate-intensity level. In some small pockets, higher-intensity fire effects were visible. As demonstrated by the Mudersbach Fire, wildland fire use fires often create a mosaic across the landscape, with some areas burned at a low level of intensity and others burned at a higher intensity. There are also areas within the fire perimeter that did not burn at all. The important thing for forest managers was that fire was allowed to perform its natural function across the landscape.

## The Greater Williams Community Wildfire Protection Plan

A plan intended to help protect the greater Williams area from the threat of wildland fire was approved by the State of Arizona in mid-2005.

The Greater Williams Area Community Wildfire Protection Plan, which was commissioned in September 2004, was a collaborative effort between the City of Williams, Coconino County, Parks-Bellemont Fire District, Sherwood Forest Estates Fire District, Kaibab National Forest, Arizona State Land Department and concerned citizens.

According to the CWPP, "the City of Williams and Coconino County identified catastrophic wildfire as one of the highest costs and threats to the communities in this area and in Northern Arizona. The development of the CWPP is a direct response to their priorities and will help mitigate the potential loss of lives, homes, infrastructure, and irreplaceable natural resources."

To those ends, the plan identifies specific areas at-risk for wildland fire and evaluates treatment options, such as thinning and prescribed burning, that reduce risk. The plan prioritizes areas for treatment, thus providing community direction to land managers about how, when and where fuels reduction projects should take place. The area covered by the Greater Williams CWPP was defined by the City of Williams and Coconino County as the timbered area of the Williams Ranger District on the Kaibab National Forest including all private inholdings.

The Greater Williams CWPP is available online at [www.co.coconino.az.us](http://www.co.coconino.az.us) under "Emergency Services."



# Rangeland Management

Buffalo herd grazing in House Rock Valley located in the southeast corner of the North Kaibab Ranger District. Photo taken by L. J. Prater in 1947. Photo by USDA Forest Service.

## North Kaibab District

Range conditions on the North Kaibab Ranger District were significantly improved this year following a very wet winter.

The Ryan and Willis grazing allotments were almost fully utilized by livestock, and the permittees on the Burro and Houserock allotments began the process of building their herds back up, having sold off large numbers in previous years due to drought.

The four Kane Ranch allotments – Kanab Creek, Kane, Central Summer and Central Winter – were not grazed while the permittee worked to complete the sale of his property.

Rangeland management specialists treated over 540 acres on the Central Winter allotment for noxious weeds, reconstructed a mile and half of holding pasture fence on the Ryan allotment, and repaired three trick tanks and four wildlife guzzlers.

The rangeland management team also collected vegetation data and conducted forage production studies on the Houserock and Ryan allotments, which will be used in developing a new environmental analysis and management plan for those allotments in 2006. Range and timber specialists worked together to gather vegetation data throughout the district that will be utilized during the Kaibab National Forest's forest plan revision process, which also begins in 2006.

Rangeland managers issued new grazing permits for the Burro and Houserock allotments, and monitored the Burro, Ryan and Willis allotments for permit compliance.

Finally, the north zone range staff completed noxious weed eradication training, part of the Kaibab's commitment to implement the 2005 environmental impact statement adopted by three national forests in northern Arizona.

## Williams & Tusayan Districts

Range conditions and forage production improved dramatically due to above average precipitation in 2005. Permittees on the allotments that were stocked this year ran approximately 70 percent of their authorized number of livestock. The Pine Creek allotment was not grazed, and the Double A,

allotments were only partially used due to resource protection. The high prices of replacement livestock prevented most permittees from stocking 90 percent of their allotted numbers.

The use of the agra-axe to restore grassland habitat continues at a rapid pace. A total of 1,100 acres were completed, with an additional 1,100 acres tied to funds provided by the Habitat Partnership or Rocky Mountain Elk Association. The work accomplished through this funding over the past ten years has been so successful that the Rocky Mountain Elk Association recognized the Williams Ranger District with a national award this year.

South zone range managers also oversaw the reconstruction of five stock tanks in scattered locations throughout the forest. This included MK Tank, which overtopped last year during an extreme flooding event, as well as Section 22, Merchant and Mesa Tanks. Polson Tank was also reconstructed after being breached by the same event that almost destroyed MK Tank. These water sources are critical for the effective management of domestic livestock and are also important for wildlife.

Rangeland managers monitored all 31 allotments on the south zone, administered 550,000 acres to standard, issued a new permit for the Corva Allotment, and revised the management plans for the Sitgreaves and Spitz Hill allotments.

The rangeland management team's aggressive noxious weed program treated about 850 acres in 2005 – about 250 acres by herbicidal methods and the remaining 600 acres manually. Most of the treatments were targeted on Kendrick Peak, where the Pumpkin Fire has created conditions for the spread of bull thistle within the wilderness area.



Forest Service employee Don Smith applies herbicide to bull thistle in the area where the Pumpkin Fire burned in 2000 around Kendrick Mountain.

# ENGINEERING



## Road Maintenance

The engineering organization, which provides all engineering-related services for the Kaibab and Coconino National Forests, accomplished approximately \$2.3 million worth of work on the Kaibab National Forest in Fiscal Year 2005. Of this total, approximately \$1.2 million was spent on roads-related work and approximately \$1.1 million was

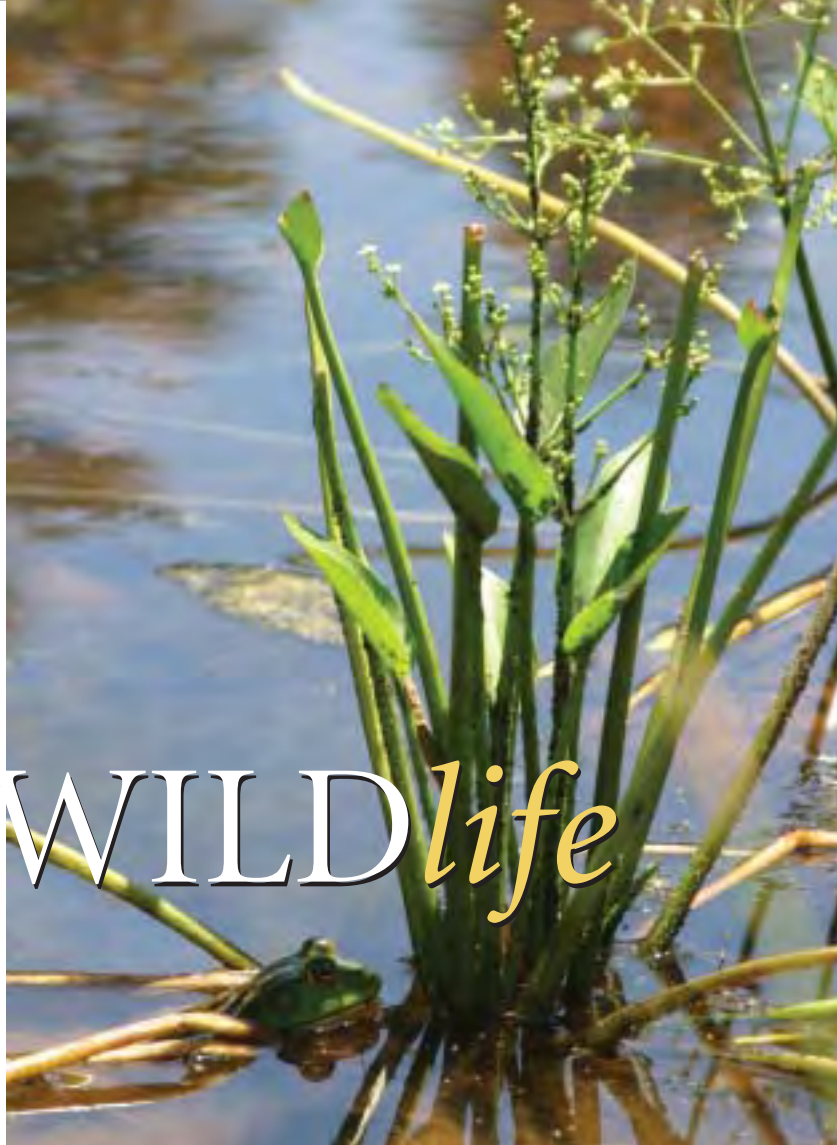
spent toward facility-related work.

Roads maintenance operations were greatly impacted last fiscal year by very wet winter weather conditions that were experienced throughout northern Arizona. There was sufficient travel on forest roads when conditions were wet and muddy that road managers saw an increased amount of damage to the road system. Funding for routine road maintenance doesn't adequate-

ly cover the additional work needed to repair road damage resulting from heavy use during periods of wet weather.

Despite these challenges, 549 miles of roads were maintained across the forest, 237 miles on the Williams District, 94 miles on the Tusayan District and 217 miles on the North Kaibab District. Approximately 95% of the road maintenance on the three ranger districts





*Aquatic wildlife finds a place to hide while looking for its next meal.*

### South Zone

Wildlife biologists on the Williams and Tusayan Districts spent much of 2005 working to improve wildlife habitat and water sources. Highlights include the reconstruction of two miles of fence around Bull Basin to exclude livestock from the area, modification of other fences on both the Williams and Tusayan Ranger Districts to allow pronghorn antelope to access important habitat, repairs to Elk and Middle Tanks, which are utilized as fisheries, and restoration of 75 acres of aspen on the Williams Ranger District. In addition, wildlife biologists fixed 16 water guzzlers on the districts to provide water for wildlife.

District biologists and other trained personnel surveyed approximately 18,000 acres for Mexican spotted owl and monitored three owl protection activity centers on the south zone. Biologists also completed training for and first year surveys of birds on the Kaibab's Management Indicator Species list, and organized the annual bald eagle survey conducted each January in coordination with the Arizona Game and Fish Department.

### North Zone

North Kaibab Ranger District wildlife biologists focused on birds, deer and people in 2005.

District biologists surveyed approximately 40,000 acres for Mexican spotted owls and northern goshawks, staked out restricted areas around three goshawk family areas, and conducted activity checks on about 15 other family areas. They also conducted two peregrine falcon surveys, and coordinated between the Peregrine Fund, Arizona Game & Fish Department and district managers to provide protection for nesting California condors. The biologists also completed training for and first year surveys of birds on the Kaibab's Management Indicator Species list.

In support of mule deer habitat, district biologists worked with volunteers from the Arizona Deer Association's Buckskin Chapter on the reconstruction of a cattle enclosure fence around the Three Lakes historical cabin and lake area. The biologists also supervised maintenance and repairs on other wildlife waters, using money provided by the Arizona Game & Fish Department's Sikes Funds. Biologist worked with the Department on surveys of the Kaibab mule deer herd, and hosted two field trips for leaders of the Arizona Game & Fish Department and Arizona Deer Association.

The biggest effort on the North Kaibab Ranger District in 2005 was the initial planning for the West Side Habitat Improvement Project, a joint Forest Service and Arizona Game & Fish Department project that will improve about 25,000 acres of mule deer winter habitat over the next 5-7 years.

But the district's biologists didn't restrict their work to animals. They also gave educational talks to various audiences including equestrians at the annual Grand Canyon endurance ride, environmental law students from Arizona State University, and children attending Smokey Bear fire awareness and prevention programs.

### Facilities

Facility engineers accomplished several projects at the Tusayan Ranger Station including the completion of a new sewer line that connects the ranger station to the South Grand Canyon Sanitary District's wastewater treatment plant in Tusayan; the construction of a new covered porch and accessible access ramp at the district office building; the re-roofing of the historic ranger's residence and rock house with fire-retardant wood shakes; and the installation of new smoke alarms in six of the

residences. Elsewhere on the forest, facility engineers installed a new potable water system at the Spring Valley Cabin on the Williams Ranger District and removed the lead-based paint from and repainted the exterior of the shop at the Big Springs work center on the North Kaibab Ranger District.

The Hazardous Materials Coordinator issued contracts for the removal and proper disposal of various hazardous materials and wastes stored at several administrative sites, conducted an environmental inspection of the

Williams Ski Area, and responded to five instances of illegal dumping of waste on national forest lands.

The fleet management organization provided for fleet rental, replacement, operations, and maintenance for all government owned or leased vehicles across the forest. In addition to these duties, fleet managers also repaired and maintained the Forest Service Southwestern Region's 1925 Dodge Brothers truck, which was prominently featured in Forest Service Centennial celebrations from New Mexico to Oregon.

was accomplished through contracts with private vendors. The forest road crew performed the remaining 5% of the maintenance work on the Kaibab.

A grant from the Arizona Game and Fish Department funded 66 miles of contract maintenance work on high clearance roads on the Williams Ranger District. The forest road crew, using special fire rehabilitation funds, accomplished 30 miles of road maintenance in the Pumpkin Fire area.

### Roads Analysis

In 2005, the Kaibab National Forest began the process of identifying changes to the forest transportation system that may be needed to meet current or future management objectives. The roads analysis process began on the Tusayan Ranger District but will eventually encompass the entire forest.

According to the Forest Service's report on the Roads Analysis Process, "Expanding road networks have created many opportunities for new uses and

activities in national forests, but they have also dramatically altered the character of the landscape." The report goes on to say that, "The Forest Service must find an appropriate balance between the benefits of access to the national forests and the costs of road-associated effects to ecosystem values."

As part of the Tusayan Roads Analysis Process, forest managers mapped the existing road system, which comprises 419 roads, and evaluated various physical, biological, social, cultural, economic and

political conditions. Based on the values and risks associated with each road, recommendations are being developed as to their future status. Results of the analysis process could include decommissioning specific roads, closing roads seasonally or leaving roads open.

Forest managers hope to put out a recommendation for public review in 2006 with a decision coming later in the year.

# Budget – Fiscal Year 2005

## Kaibab National Forest Budget & Expenditures

Fiscal Year 2005: 10/01/04 – 09/30/05

**Forest Budget:** \$15,031,255  
**National Forest Acres:** 1.6 million

### Employees

Permanent:.....105  
 Permanent Seasonal:.....28  
 Temporary Seasonal:.....74

Land Use	Special Use Permits
Communications.....	32
Power lines.....	11
Oil & gas lines.....	8

* Minerals	Number	Value
sandstone contracts	22	\$551,100 (estimate)

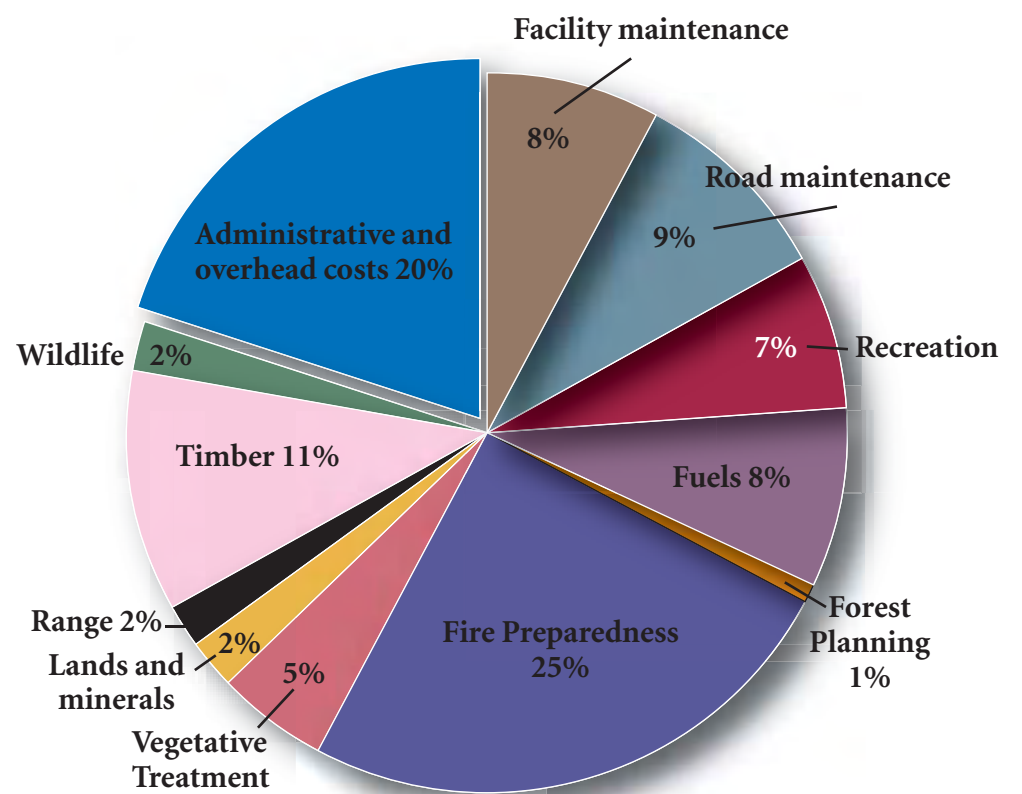
\* Sandstone quarries on the Kaibab account for approximately 45-50% of the national production; the stone is used as building material in the construction industry.

Recreation Fee Demo sites	Fees collected
Ten-X Campground.....	\$50,688
Spring Valley Cabin.....	\$12,620

95% of the fees collected are returned to the Kaibab and used to maintain the sites.

Vegetation Treatments.....	28,704 total acres treated
Prescribed fire.....	8,433 acres treated
Mechanical treatments- (thinning, piling).....	10,848 acres treated
Wildland Fire Use.....	9,423 acres treated

## Program Allocations of forest budget in percentages



A view into Sycamore Canyon from a scenic point on the Williams Ranger District. Shown in silhouette are Fred Merkle (left), the Forest Supervisor and assistant Regional Forester Quincy Randles. Photo taken in 1934 by F. L. Kirby. Photo by USDA Forest Service.

# Recreation Program

*It's amazing the difference rain and snow make on our forests! Lakes on the Williams District were full and overflowing for the first time in many years, and there was snow on the ground on the North Kaibab District into June. Plants and grasses responded to the moisture too, with a flush of wildflowers blooming throughout the summer. Forest users seemed to be excited to recreate last year, we noted increases in camping, fishing, wildlife and wildflower viewing and good participation in winter sport activities such as skiing and snow play.*

Williams District campgrounds were all well used, in fact Kaibab Lake Campground was full every weekend and busy during the weekdays. Ten-X Campground at Tusayan also saw some increases in use, with the group site proving to be very popular. North Kaibab campground use was steady, and will be back to full capacity when the newly reconstructed DeMotte Campground reopens in the summer of 2006. Spring Valley Rental Cabin was well used this year, and is now available to be rented year-round (barring heavy snow). Facilities include both the cabin, and the newly restored bunkhouse.

## Visitor Surveys

Every five years a certain number of national forests conduct visitor surveys to learn more about the people recreating on the national forest. Last year recreation managers set up survey stations at developed recreation sites, trailheads, and in dispersed recreation settings across the Forest to interview forest users. Visitors were asked questions about recreation experiences and activities, length of stay, satisfaction with facilities, roads, scenery, trails as well as expenses related to recreation activities. This information provides recreation specialists a general "report card" about how we are doing in recreation management. It also assists forest managers in making decisions on recreation investments, identifying customer needs or concerns, and generally helps the Forest Service better serve its customers and better manage forest resources.



*Top Photo: Fishing enthusiast enjoys a favorite pastime at White Horse Lake. Taken in 1937 by C. Cunningham. Photo by USDA Forest Service.*

*Bottom Photo: Today, White Horse Lake still provides recreational opportunities, whether it's fishing or canoeing. Photo by USDA Forest Service.*

## Forest Health Projects

More than 400 acres of ponderosa pine forests were treated in four developed recreation sites on the Williams Ranger District in 2004 and 2005. Bark beetle-infested trees and some smaller-diameter ponderosa pine trees were removed at Kaibab, White Horse, Dogtown, and Cataract Lake Campgrounds. These recreation sites had experienced high levels of tree mortality over the previous few years. The preventative thinning and removal of infested-tree should increase tree resistance to bark beetle attack in both the short-term and in the future.

## Recreation Facilities

Recreation project engineers awarded a \$793,000 facilities and roads contract for renovation of the DeMotte Campground on the North Kaibab District. Plans call for making 12 major visitor-oriented improvements to the campground, including doubling the number of campsites, widening the access roads and parking spurs, replacing the existing toilets and amphitheater, and installing a potable drinking water system. The construction project is expected to continue into 2006.

Project engineers also awarded a contract to perform structural repairs to the ramadas at the Ten-X Campground on the Tusayan District and awarded a contract to an engineering design firm to provide an electrical design for future renovations at the Jacob Lake Campground on the North Kaibab District. In addition, new vault toilets were installed at Cataract Lake Campground and Bill Williams trailhead on the Williams District.



*Top photo: Hull Cabin Historic District is located on the Tusayan Ranger District. The appearance of the buildings have changed little since it was built in 1888 of ponderosa pine logs. Photo by USDA Forest Service.*

*Bottom: In the early 1900's Hull Cabin served as an important administrative center for rangers on the Tusayan National Forest. Photo taken in 1930 by S.F. Wilson. Photo by USDA Forest Service*





# Bark Beetle Activity



## Contact Us

For more information, or to comment on our land management activities please contact the nearest Kaibab National Forest Office. If you would like to comment on this report, address your comments to Kaibab Accomplishments and send them through the postal service, or send them electronically to the following email address:  
**mailroom\_r3\_kaibab@fs.fed.us.**

Visit us through the internet at:  
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Bark beetle activity in the ponderosa pine forests declined significantly in 2005 on the Kaibab National Forest. No more than 94 acres had signs of bark beetle activity compared with over 29,000 acres in 2004 and 72,000 acres in 2003. Interestingly, pine mortality in 2005 was primarily caused by the western pine beetle, in contrast to the pine mortality that occurred in 2002 through 2004, caused by pine engraver beetles. The western pine beetle prefers to attack larger pine trees; many of the ponderosa pine trees that died last year were large yellow pines.

A limited amount of smaller pines attacked by pine engraver beetles were observed on the southern edge of the Williams Ranger District. The combination of increased precipitation, higher natural enemy populations, and fewer areas of susceptible hosts likely led to the large decrease in pine bark beetle activity over the last two years.

The greatest amount of tree mortality caused by bark beetle occurred in white fir and Douglas fir mixed conifer forests; a steady increase has been observed in the forest. In 2001, mortality was observed on about 550 acres. By 2005, more than 4,000 acres had been impacted. Bill Williams Mountain has experienced very high levels of white fir mortality over the last two years. One reason that fir mortality has occurred in a slower and more gradual manner than in our pine forests is because fir engraver beetles and Douglas-fir beetles produce one generation per year compared with pine beetles that have two or more generations per year.

Acres of aspen defoliation, crown dieback, and mortality doubled on the Kaibab, from 17,782 acres in 2004 to 35,350 acres in 2005. Most of this damage is on the North Kaibab Ranger District. Dieback and mortality was caused by weather events, starting with a frost in June 1999 and followed by the severe drought of 2002-2003. Although dieback and mortality was originally greater at lower elevations, it continued to increase in higher elevation sites in 2005. Aspen dieback is marked by crown thinning due to branch mortality, with eventual death of whole trees.



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One of the many lookout towers on the Kaibab NF used in the early days of fire fighting. Photo taken in 1930 by E. S. Ship. Photo by USDA Forest Service.

Cover photo: Kaibab Lodge, built around 1926-1927 and located in VT Park on the North Kaibab Ranger District, still welcomes travelers visiting the Grand Canyon. Photo taken in 1947 by L. J. Prater. Photo by USDA Forest Service.