

United States
Department of
Agriculture

Forest Service

Mark Twain
National Forest



Mark Twain National Forest

Annual Report Fiscal Year 2001

October 1, 2000—September 30, 2001



Fee Demonstration projects allow the Forest Service to retain 80% of income generated at a recreation facility for operating, maintaining and improving the facility. Mark Twain National Forest has 10 Fee Demonstration sites including Chadwick ATV/motorcycle area.

At Chadwick ATV/motorcycle area, fees were used to pave roads in the campground, construct pull through camp sites for trailers and motor homes, provide electrical hook-ups, improve the water system and relocate and reconstruct trails. The last few years the Forest was able to retain over \$ 70,000 each year to reinvest at Chadwick. Riders pay a daily or annual fee for the opportunity to ride at Chadwick.

Mark Twain National Forest 2001

We are pleased to share with you our Fiscal Year (FY) 2001 annual report of accomplishments. As you may know, these summaries help benchmark our progress restoring Missouri's ecosystems, which were severely impacted at the end of the 1800s. Our forest plan, first approved in 1986 and subsequently amended to update conditions and goals, continues to be the road map we use to assess our accomplishments.

We finished 2001 welcoming several new key staff members: Jenny Farenbaugh is the new district ranger at Ava/Cassville/Willow Springs Ranger Districts; Gloria Chrismer is the deputy district ranger at Salem Ranger District, and Mike Sanders is our new deputy forest supervisor. We wished long-time ranger Warren Dubois in Salem a happy retirement and welcome Thomas Haines to that position. We have also added a number of staff to our firefighting organization throughout the forest, and look forward to inaugurating the new Missouri Interagency Fire Coordination Center, currently under construction next to our supervisor's office. Dispatchers will manage Missouri and Iowa firefighters from both state and federal agencies as well as local fire districts to respond to national fire situations.

This year also brought us a significant challenge we expect to track for several years. Our maturing red and white oaks, impacted by several drought years, are being attacked by a combination of root fungus and borers. At this stage we expect at least one-third of Mark Twain National Forest's 1.5 million acres to be affected. Our challenge is to determine how best to maintain healthy working forests.

We continue to hold a number of meetings throughout the state, get more than 6,000 basic information requests a year and offer updated information on our website at <http://www.fs.fed.us/r9/marktwain/> We look forward to hearing from you!



RANDY MOORE
Forest Supervisor



Mike Sanders
Deputy Forest Supervisor

THE FOREST PLAN - The National Forest Management Act directed all National Forests to develop a plan to guide Forest managers. Mark Twain's Land and Resource Management Plan (the Forest Plan) was approved in 1986. The Forest Plan provides an integrated, multi-resource approach to forest and watershed restoration and maintenance.

The Forest Plan was designed to cover a period of up to fifteen years. Before the Forest was able to revise the Forest Plan, Congress asked the Forest Service to revise Forest Plan regulations. Mark Twain's Forest Plan revision was delayed until the revised regulations were issued. The revised regulations were issued in FY 2000 and Mark Twain is scheduled to start revising the Forest Plan in FY 2002.

FOREST PLAN MONITORING - Each year, forest accomplishments are monitored and evaluated. This allows us to see if we are staying within Forest Plan standards and guidelines. It also lets us know if the Forest Plan needs adjustments. This report highlights the results of Forest Plan monitoring.

APPROPRIATED DOLLARS - When the Land and Resource Plan was developed, plan objectives were set at 100% funding. In the reality of management most programs are not completely funded. Since the implementation of the Plan, the Forest has operated with an average funding of 49.1%. Congress sets funding levels for programs. Some programs are funded at 100%, others not funded are often accomplished in conjunction with a funded project, through partnership money or by volunteers. This should be taken into account as you interpret the data in this report.

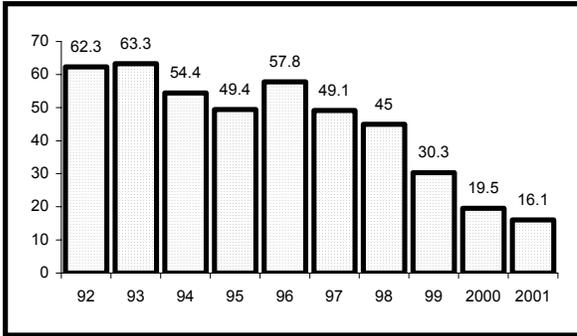
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Minerals – There are 36 mineral leases for the right to mine lead, zinc, and copper from under Mark Twain National Forest. The Forest owns the mineral rights under most national forest lands but the Bureau of Land Management is responsible for the leasing of mineral rights. The Federal government collects a royalty payment for the minerals mined and returns 25% of the royalty to the State of Missouri to be distributed to the counties with national forest lands. The payment to Missouri in FY 2001 was \$600,000.

TIMBER PRODUCTION

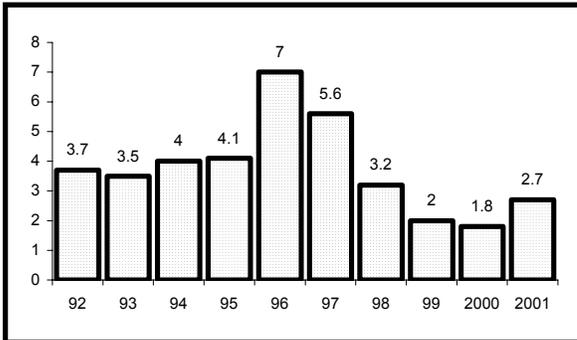
MMBF



The in the amount of timber sold continues to decline with only 16.1 million board feet (MMBF) sold in FY 2001. In FY 2000 19.5 MMBF was sold. The ten-year high was in FY 1993 with 63.3 MMBF sold. The use of clearcutting as a harvest method increased to 13% of sell acres in FY 2001 but averaged less than 10% for the 10 years. The percentage of shelterwood acres decreased from 16.5 to 9.1 while seed tree harvest showed a slight increase. Acres sold totaled 4,315 compared to 5,218 acres sold in FY 2000. Uneven-age management and commercial thinning accounted for nearly 60% of the total acres sold.

TIMBER STAND IMPROVEMENT

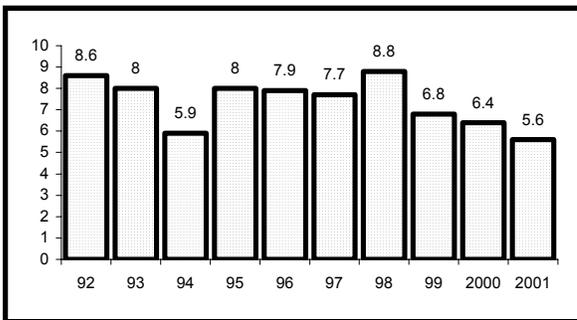
1,000 ACRES



Improving the quality of the timber on national forest lands is one of the goals of forest management. Timber stand improvement (TSI) is usually done in young timber stands by thinning and removing unwanted trees. This allows the remaining trees to grow healthier and more vigorous. Recent studies have shown that the amount of trees in some stand in the Ozarks are 3 to 4 times per acre above what is considered normal for a healthy forest. This puts the trees in competition with each other for water, soil and light resources. This makes all the trees more susceptible to insects and diseases. TSI was completed on 2,689 acres in FY 2001 a 50% increase over FY 2000.

REFORESTATION

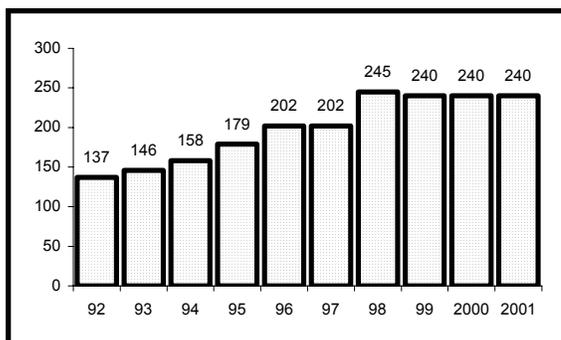
1,000 ACRES



Reforestation showed a slight decline in FY 2001. This is a result of the decline of the number of acres harvested over the last few years. In FY 2001, 5,613 acres were reforested. Reforestation is done depending on the tree species and location. Most reforestation is accomplished by sprouting from stumps of harvested trees. Other reforestation methods include leaving selected trees during harvesting to provide a seed source, and planting. Some areas reforested are land once forested but converted to other uses such as pasture or farm land.

RECREATION USE

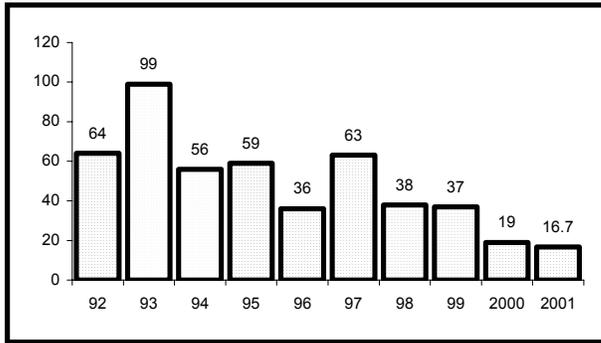
10,000 RVDs(1)



Recreation use has remained about the same for the last three years. Six of the more popular recreation areas were operated by local business through special use permits. Eight developed recreation areas were added to the fee demonstration program. This is in addition to Chadwick and Sutton Bluff ATV/motorcycle areas. The program allows the Forest to retain over 80% of the fees collected to maintain and improve the recreation sites, their operation and provide support for volunteer host. Cobb Ridge campground in Christian County has been renovated and expanded and now features electrical hook-ups at most sites. The 2,400,000 recreation visitor day (RVDs) shown for FY 2001 do not include recreation in Wilderness areas or wildlife related uses such as hunting and fishing, which is reported elsewhere in this report.

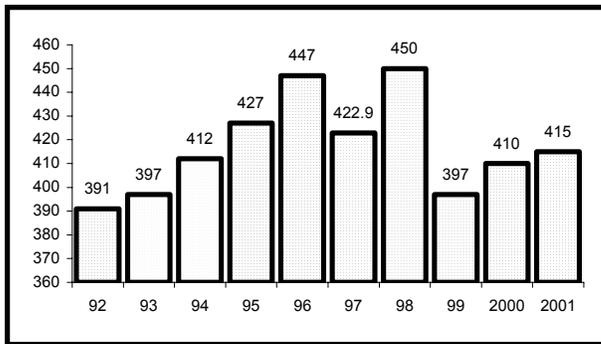
Heritage Resources -The heritage program surveys national forest lands to identify historical and cultural sites. In FY 2001, 25,956 acres of national forest lands were surveyed for cultural resources, and 91 historic and prehistoric sites were identified for preservation and protection. Volunteers contributed 11,000 hours as part of a Passport In Time project. Volunteers do a variety of work including surveying and mapping cultural sites, collection and cataloging of artifacts and interpretation of sites.

TRAILS-Construction/Reconstruction
MILES



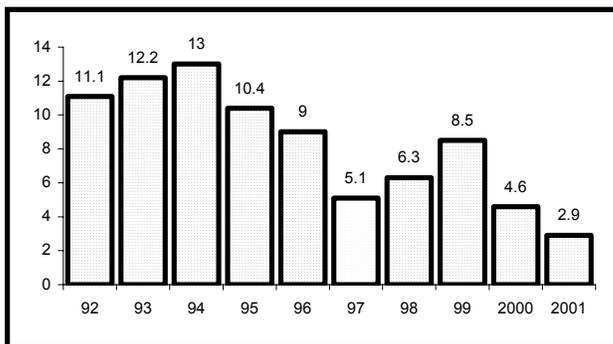
Almost seventeen miles of existing trail were reconstructed, but due to limited resources, only 375 miles of the 750 miles of trail on the Mark Twain were fully maintained in FY 2001. Parts of the Ozark Trail were maintained through a partnership with AmeriCorps, and assistance from Conservation Federation Trail Team volunteers. In FY 2001, the Forest purchased a trail maintenance machine from fee demonstration and appropriated funds and grants to aid in future trail maintenance.

WILDLIFE USE
WFUD (2)



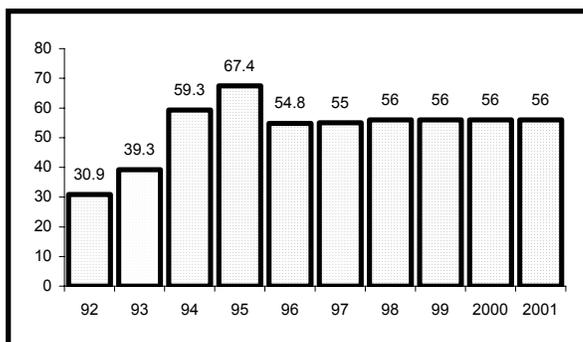
Providing habitat for over 530 animal species, Mark Twain National Forest works closely with Missouri Department of Conservation to manage wildlife habitat and wildlife recreation on national forest lands. Projects are designed to provide a variety of habitat for wildlife and fish. Wildlife use in the Forest continues about the same as the last three years. Almost all of the 1.5 million acres of national forest land in Missouri are open to the public for hunting and fishing. For many people, these public lands are the only areas available for their use.

WILDLIFE IMPROVEMENTS



The Forest continues to work to improve and monitor wildlife habitats on national forest lands. Not all wildlife use the same habitat, so a variety of habitats must be maintained. The amount of wildlife improvements totaled 2,916 acres, a decline from last year. Much of this work is accomplished through partnerships that provide funding and volunteer work. The Forest continues to convert rangelands back to native grasses, plant wildlife food plots, place fish structures and install protection devices such as bat gates on caves to protect threatened and endangered species. Areas of the forest are also being set aside for protection of habitat. These areas will not have any active forest activities such as timber sales or road construction.

WILDERNESS USE
1,000 RVDS (1)



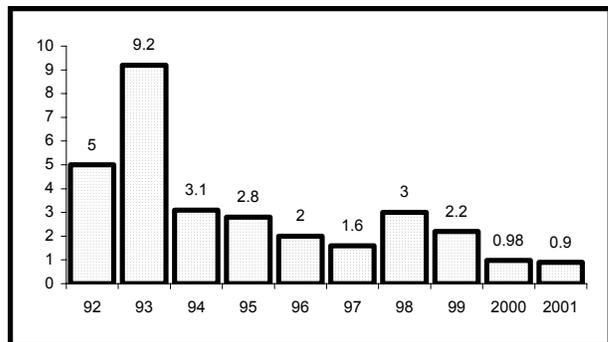
Recreation within the seven designated Wildernesses remains constant at 56,000 Recreational Visitor Days (RVDS). The highest number of actual visitors to Wilderness areas on Mark Twain enter the Irish Wilderness at White's Creek Float Camp or float through Devils Backbone Wilderness on the North Fork River. The majority of Wilderness visitors are not specifically seeking a Wilderness experience, but are seeking dispersed recreational opportunities that may occur in Wilderness. Horseback riding and hunting continue to be high uses. Uses associated with hunting and wildlife study are not included in the RVDS reported here.

(1) A Recreation Visitor Day equals 12 hours of recreation use.
(2) A Wildlife and Fish User Day equals 12 hours of use.

Range, Soil and Watershed – Range, soil and watershed management was a driving force for the establishment of the National Forest. When the Forest was established, the forest was cut over, hogs and cattle roamed free and attempts to farm poor soils caused extensive soil erosion, clogging streams with soil and gravel. Our objective to manage watersheds through reforestation and rangeland management has resulted in a healthy diverse National Forest. Riparian areas along streams and rivers have been restored with native vegetation and are protected. Open lands are being restored with native prairie grasses. In FY 2001, 55 acres of watershed improvements were completed.

LAND ADJUSTMENTS

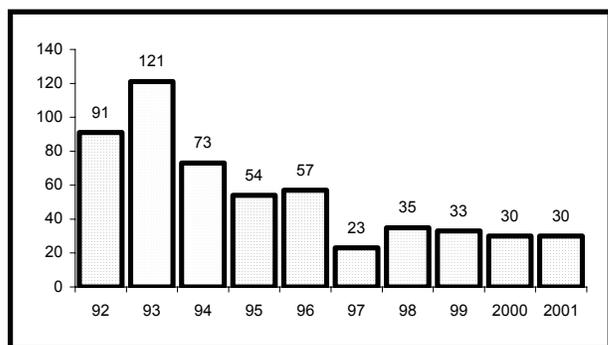
1,000 ACRES



Mark Twain owns only about 50% of the land within the Forest boundary and that land is mixed with lands that are privately-owned. Using land exchanges and purchases, national forest lands are consolidated reducing trespass and the amount of forest boundary that must be maintained. In FY 2001 393 acres were purchased with Federal Land and Water Conservation Funds, and 405 acres were exchanged. Land purchases and exchanges are done on a “willing seller, willing buyer” basis.

PROPERTY BOUNDARY SURVEY

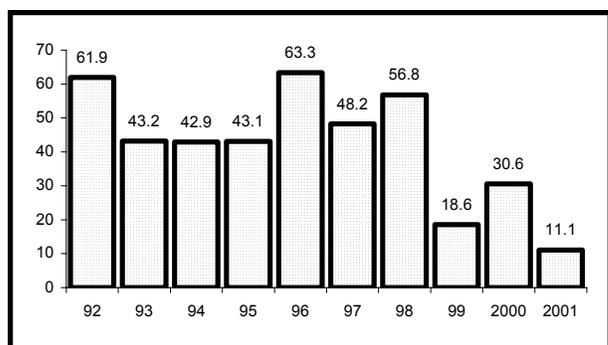
MILES



Of the three million acres within Mark Twain National Forest boundary, the Forest only owns and manages about 1.5 million acres or 50%. This land is intermixed with lands that are private, corporate, or in other Federal and State ownership. This mix of ownership results in over 7,200 miles of national forest boundary. In FY 2001, 30 miles of boundary was surveyed and 10 miles of survey boundary were maintained. This brings the total to 1,969 miles of surveyed boundary. Besides determining national forest boundaries surveys define boundaries of Wilderness, recreation, and natural areas, and road and utility rights of ways.

ROADS DEVELOPMENT

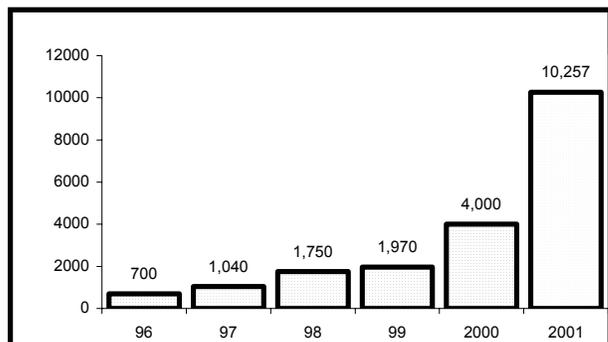
MILES



The Forest roads network is important to provide the public and resource managers access to national forest lands. The public uses roads for a variety of recreational experiences including: camping, hiking, hunting, river access points and one of the most popular recreation experiences, driving for pleasure. Resource managers use roads to protect and manage the natural resources. In FY 2001 11.1 miles of road reconstruction was completed. Road reconstruction is done to maintain roads to the standard they were designed. The Forest Service roads are designed for a variety of uses from two lane forest roads used for timber harvesting and dispersed camping to paved roads in campgrounds. All open Forest roads are open for recreation users.

FUEL REDUCTION

ACRES



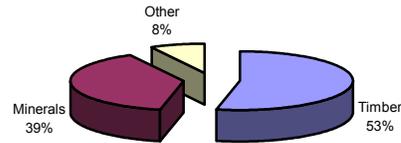
One way to prevent wildfires is to reduce the amount of fuel on the forest floor. On Mark Twain National Forest, prescribed fire and mechanical methods are used, but prescribed fire is the main tool for fuel reduction. In FY 2001, a helicopter and firefighting crew was stationed on the forest to help in wildfire suppression and assist in the prescribed fire program. The helicopter and firefighting crew worked several prescribed fires on national forest and national park lands. The helicopter was used to set and monitor several prescribed fires. The largest project was the Big Creek prescribed fire on Ava District where 6,289 acres were burned to reduce fuels. In FY 2001 there were 186 wildfires burning 3,938 acres. Mark Twain sent two fire personnel to New York City to assist in the 9-11 recovery efforts at the World Trade Center.

Forest Finances

EXPENDITURES

PROGRAM	DOLLARS
Minerals	290,000
Range	230,000
Land Management	1,124,000
Wildlife/Fish	909,000
Timber	2,605,000
Fire	4,397,000
Recreation Management	1,084,000
Road Improvements and Maintenance	1,200,000
Trail Improvements and Maintenance	348,000
Law Enforcement	141,000
Land and Water Conservation Fund	872,000
Vegetation and Watershed Management	560,000
Forest Planning/Inventory and Monitoring	1,090,000
Additional Miscellaneous Programs	3,702,000
TOTAL	\$18,552,000

INCOME



INCOME

PROGRAM	DOLLARS
Minerals	2,400,000
Range	9,000
Land/Uses	52,000
Timber	3,283,000
Recreation	7,000
TOTAL	\$5,751,000

In the past, each year the National Forests returned 25% of all revenues to the states where national forest lands are located. This money was distributed to the counties, prorated on the number of national forest acres in the county. These funds are to be used to benefit public schools and county roads. In FY 2001, the "Secure Rural School and Community Self-Determination Act of 2000" took effect. Counties could choose to take the average of the three high years since 1986 or continue to receive the standard 25% of revenues. The high three years for Mark Twain were 1988, 89, 90. During these three years, royalties from mining minerals were included in the forest revenue and these revenues were very high. When the law was passed, it did not address the mineral royalties received by "Weeks Law" land in the eastern United States. Therefore, this year counties that chose to adopt the secure payment received the average of the high three which included mineral royalties and the 25% royalty payment for FY 2001. This may change in the future. Counties with federal lands also receive Payments in Lieu of Taxes (PILT). PILT funds are not limited to schools and roads.

COUNTY	NET NF ACRES	FY 2001 FULL PAYMENT BASE	FY 2001 MINERALS PAYMENTS	FY 2001 PILT PAYMENTS	Total
Barry	55,067	24,182	21,996	61,437	107,615
Bollinger	1,646	726	660	1,502	2,888
Boone	4,142	1,826	1,660	3,853	7,339
Butler	48,374	81,141	19,399	40,828	141,368
Callaway	12,168	9,117	4,879	11,232	25,228
Carter	90,646	152,760	36,058	91,735	280,553
Christian	52,077	86,814	20,883	47,466	155,163
Crawford	50,053	83,572	20,104	45,645	149,321
Dent	72,492	117,711	29,070	67,997	214,778
Douglas	40,910	69,087	16,405	37,227	122,719
Howell	49,274	82,661	19,759	44,751	147,171
Iron	95,314	161,270	38,222	86,724	286,216
Laclede	29,425	12,958	15,364	26,693	55,015
Madison	51,306	84,484	23,107	47,020	154,611
Oregon	105,612	169,880	42,352	96,119	308,351
Ozark	38,512	65,237	15,443	56,894	137,574
Phelps	65,352	107,884	26,207	57,050	191,141
Pulaski	48,197	79,622	19,324	42,391	141,337
Reynolds	89,915	150,329	36,046	101,975	288,350
Ripley	97,124	161,067	38,948	88,325	288,340
St. Francois	673	297	269	599	1,165
Ste. Genevieve	10,254	17,322	4,111	9,334	30,767
Shannon	83,126	140,604	33,335	114,927	288,866
Stone	10,304	26,338	4,077	52,126	82,541
Taney	65,300	107,783	26,186	84,737	218,706
Texas	48,890	81,648	19,605	43,241	144,494
Washington	82,398	138,578	33,014	74,932	246,524
Wayne	88,332	146,885	35,422	128,942	311,249
Wright	7,159	11,953	2,870	6,516	21,339
Total	1,494,042	\$2,373,735	\$604,774	\$1,572,218	\$4,550,727