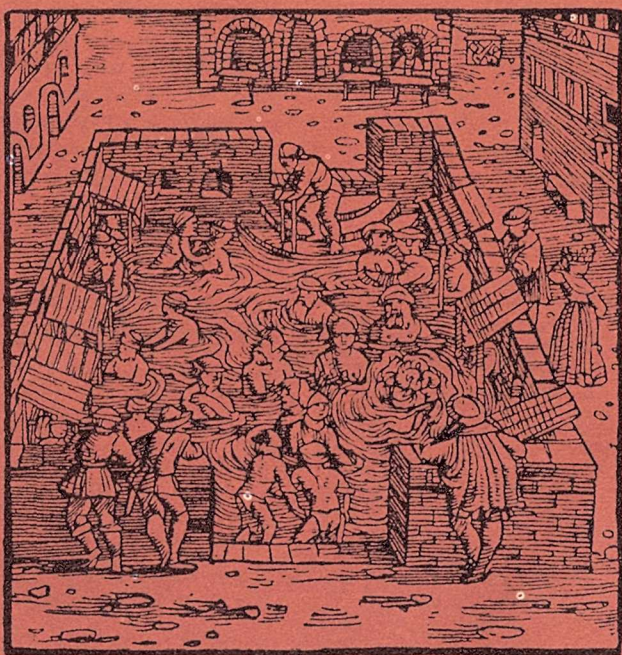


HOT SPRINGS



NATIONAL PARK • ARKANSAS

the springs

Several theories have been advanced to explain the mechanism of the park's 47 hot springs, which are along a fault, or ancient break in the earth's crust. The most favored theory is that rainwater sinks into the earth, then rises along tilted layers of rock to emerge through the fault at the southwest base of Hot Springs Mountain. Another theory is that the water escapes from cooling, molten rocks in the earth's interior, and rises to the surface.

More than a million gallons of water, with an average temperature of 143°F., flow from the hot springs each day. Explanations for the source of the heat include 1) passage of the water close to an underground mass of heated rock; 2) chemical reactions taking place near the water; 3) friction from rock masses sliding against each other; 4) compression from the overlying rock burden; and 5) radioactive minerals.

Chemical composition of the Hot Springs waters in parts per million

Silica (SiO ₂)	45	Sulfate (SO ₄)	7.8
Calcium (Ca)	45	Chloride (Cl)	2
Magnesium (Mg)	4.9	Fluoride (F)	.1
Sodium (Na)	4	Nitrate (NO ₃)	.3
Potassium (K)	1.6	Phosphate (PO ₄)	.1
Bicarbonate (HCO ₃)	162		

Gases in cubic centimeters per liter at 0° C. and 760 millimeters pressure

Nitrogen (N)	8.8	Free carbon dioxide	
Oxygen (O)	3.8	(CO ₂)	6.9

Radioactivity through radon gas emanation is 0.81 millimicrocurie per liter.

the water

Analyses of the 47 hot springs have shown the waters to be practically identical in chemical composition. The water from 45 springs is collected in common reservoirs from which all bathhouses receive identical water; the water from 2 springs can still be seen emerging naturally.

A central cooling system enables the National Park Service also to supply cooled hot-spring water to the bathhouses. In this way, all water in the properly tempered bath is obtained from the springs without loss of natural gases.

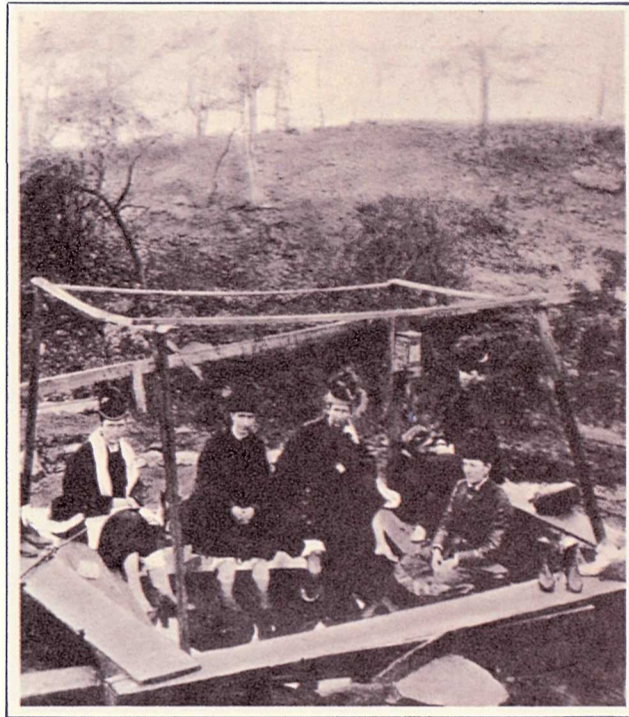
The water from the hot springs is considered to have favorable therapeutic effects. Many bathers in poor physical condition find that bathing in the warm, soothing waters has improved their overall condition. Arthritis sufferers also have shown improvement.

The hot-spring water is used exclusively in the bathhouses at Hot Springs National Park, usually with satisfactory results when the approved methods of modern hydrotherapy are used. These include full- and partial-immersion baths of different types and baths in vapor cabinets. These forms of treatment are beneficial for increasing perspiration and other elimination of body wastes.

the baths

The full immersion bath is the type customarily taken by visitors seeking relaxation or recuperation. Modern apparatus is available to give sitz baths, showers, sprays, and douches. In conjunction with all treatments, drinking the hot water is considered beneficial to some people. Several fountains furnish free hot water direct from the springs. The natural hot water, low in mineral content, has no disagreeable taste.

You may take the baths by application to the bathhouses; however, a physician's advice is recommended.



The Footbath, early 1870's. Half the day was for the ladies, the other half for the men. (Box on corner post was for donations to the poor.)

Physical Therapy Treatments. Through a complete therapy program, Libbey Memorial Physical Medicine Center in Hot Springs National Park offers special treatment of physical problems involving poor functions, tightness, or paralysis. Patients are more easily taught various functions in the buoyant thermal water.

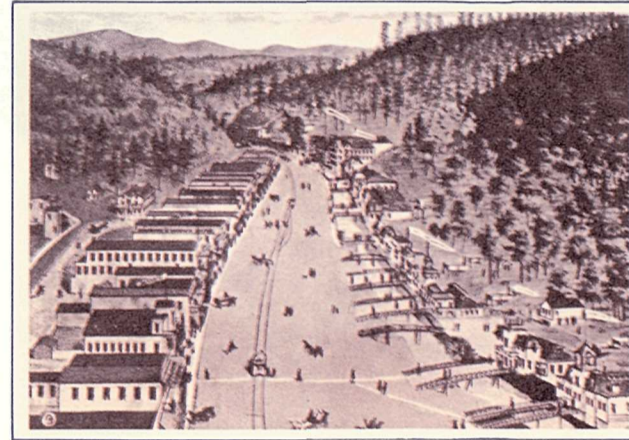
Specific underwater therapy can do much to relieve the pain and limitations of arthritis, general injuries, and nervous-system damage.

Patients are referred to this center by federally registered local physicians, who are familiar with the thermal waters, physical therapies, and modalities available. The general manager, a graduate of an accredited school, and a qualified staff work under the physicians' direction.

Physicians. Patients who try to diagnose their ailments and prescribe for themselves often fail to get the desired relief. For many ailments, the baths benefit the bather most when taken in conjunction with the proper prescribed medicines. Persons with a history of tuberculosis, cancer, or heart trouble may benefit from the baths, but should also consult a registered physician in Hot Springs before bathing.

The only physicians allowed to prescribe the waters of the hot springs are those licensed practitioners who have been approved by a Federal board of medical examiners appointed by the Secretary of the Interior, and who are registered in the office of the superintendent. This rule is for your protection. Before seeing a doctor, you should get a copy of the list of registered qualified practitioners at the information desk in the visitor center.

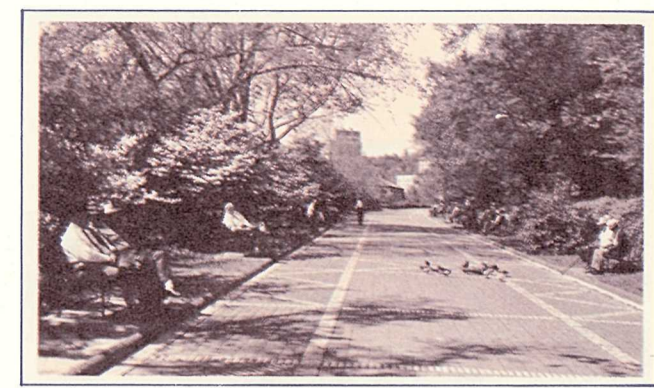
Physicians' fees for examination for the baths are generally from \$5 to \$10. These fees are not regulated by the Federal Government.



Central Avenue, early 1880's. Bathhouse Row on the right.

Bathhouses Fees. There are 18 concessioner bathhouses operated under regulations approved by the Secretary of the Interior—8 in the park and 10 at various points in the city. The water is the same in all, but prices charged for the baths differ according to equipment and accommodations furnished. Rates are set in each instance by the National Park Service, and they include charges for services of attendants. Mitts, blankets, bathrobes, laundering bathrobes and blankets, and services for handling invalids (except at the Physical Medicine Center) are not included in quoted rates. Bath tickets are redeemable according to the redemption scale for baths fixed by the National Park Service. A copy of the redemption scale is posted in each bathhouse.

Any dissatisfaction relating to administration of the baths or treatment of patients should be brought to the attention of the park superintendent.



The Promenade, behind Bathhouse Row.

Free Baths for Indigents. The Government supplies free baths for indigents pursuant to an act of Congress in 1878. Legislation requires an applicant for free baths to make oath that he is without, and unable to obtain, means to pay for baths. A false oath as to financial condition is punishable by fine or imprisonment.

Tickets are issued only to those who, after examination, are found to be suffering from diseases that may reasonably be expected to be alleviated by the baths.

Applicants for free baths may apply at the office of the superintendent. They must be prepared to provide and pay for their own board and lodging. There are no hospitals in the city of Hot Springs to which they can be admitted at Government expense, nor any funds available from which relief can be afforded or transportation furnished.

This statement is emphasized because many destitute persons come from other and distant States in the belief that the Government maintains an institution where they will be cared for free of charge.



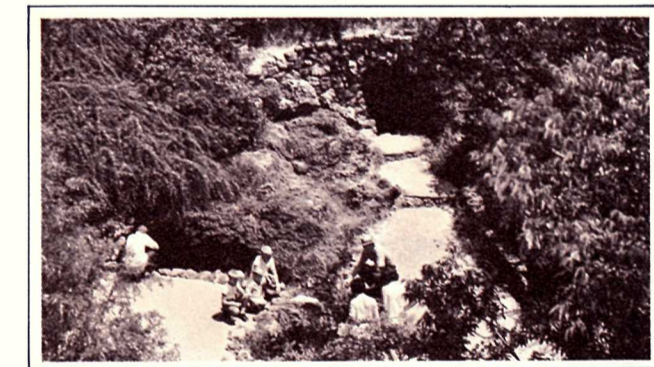
Bathhouse Row.

climate and recreation

Hot Springs has a favorable climate all year. The winters are mild, permitting outdoor recreation in comfort except at infrequent intervals, and the summers are moderated by the elevation of the forested hills. The beneficial effects of outdoor life in Hot Springs, with its pleasant climate and sunshine, are considered important aids to the bath treatments.

There are many things to do at Hot Springs. You can horseback ride, hike through the pine forests, or drive roads near the park through picturesque mountain-life settings. The man-made Lakes Catherine, Hamilton, and Ouachita are nearby on the Ouachita River. Here you can canoe, motorboat, sail, and fish.

Golf is available at the Hot Springs Golf and Country Club, and Belvedere, Oaklawn, and Lakeside Country Clubs.



The Display Hot Springs

plants and animals

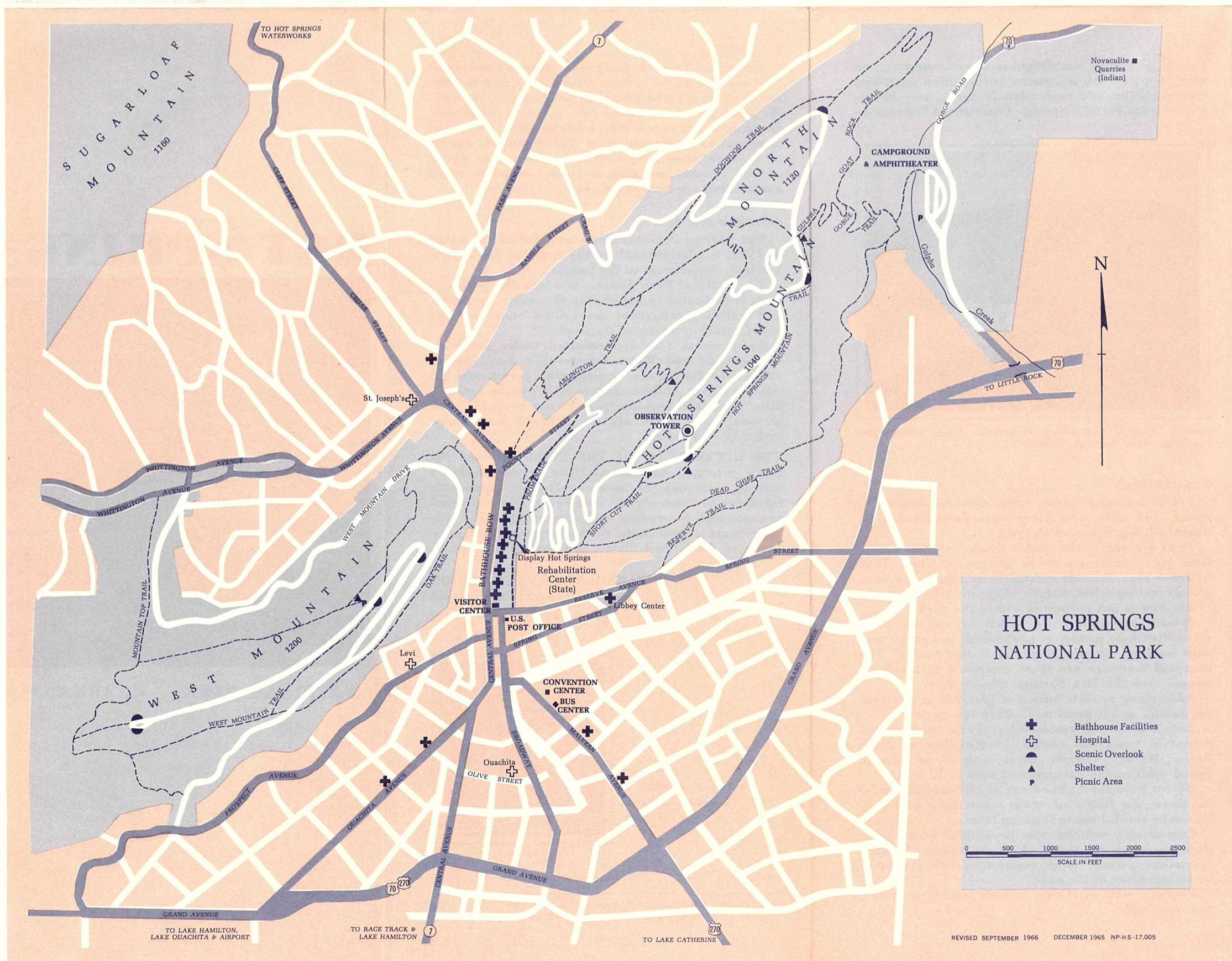
A dense forest covers the steep, rocky hills of the park. Oaks, pines, and hickories are abundant in the overstory, while huckleberries predominate in the shrub layer. Many trees have attractive flowers, and the autumn foliage is especially colorful. Wildflowers bloom all year, with goldenrod, aster, bitterweed, coreopsis, and black-eyed-susan making beautiful displays. Lichens, mosses, ferns, grasses, and sedges occur in profusion.

Animals include rabbits, squirrels, foxes, opossums, and raccoons; several species of lizards, snakes, turtles, salamanders, and frogs; and more than 90 species of birds.

park programs and services

At the visitor center, on the corner of Central and Reserve Avenues, you can see displays depicting geologic history; mechanism of the hot springs; rocks, minerals, and fossils; prehistoric culture; early and recent history; development of bathing; interesting plants and animals; and scientific studies of the hot waters.

Outdoor evening programs and nature walks are scheduled at the Gulpha Gorge Campground from June through August. Ask for a "Naturalist Program" at the visitor center.



camping

The National Park Service operates a campground in Gulpha Gorge, a beautiful valley at the foot of the eastern slope of Hot Springs Mountain. Trailer space, without electric or water connections, is available. Fireplaces and tables are provided for picnic use. The camp is 2 miles from the center of the city of Hot Springs.

how to reach Hot Springs

By car. Hot Springs is on U.S. 70 and 270, and Ark. 7. These are all-year, hard-surfaced roads.

By bus. Arkansas Motor Coaches, Continental Trailways, Wolf, and Midwest Buslines, with their connections, provide service to Hot Springs.

By airplane. Trans-Texas, Delta, and Central Airlines make daily scheduled stops at Memorial Airport, adjacent to the city of Hot Springs and about 2 miles from the park.



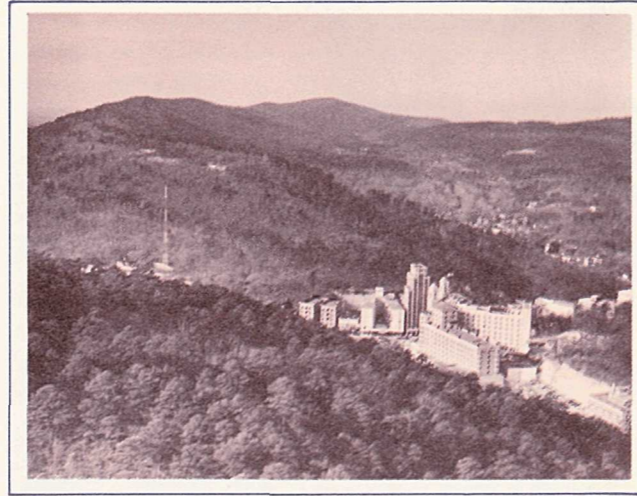
Scenic drive and overlook on West Mountain.

Hot Springs—the city

Administration of the National Park by the Federal Government does not extend to the city of Hot Springs, which operates under municipal and State laws. City and park authorities cooperate in planning joint programs and in coordinating their efforts to promote the welfare of the entire community.

There are many hotels in Hot Springs, the largest accommodating more than 1,000 guests. Among the larger hotels, you have a choice between those operating on the European plan (meals not included in price of rooms) and those on the American plan (meals included). Many motels and several hundred boarding places are available. If you desire permanent or light-housekeeping quarters, you will find kitchenette and standard apartments and cottages, furnished and unfurnished.

Lists of hotels, boardinghouses, and other accommodations, as well as general information regarding transportation and recreation features, may be obtained from the Hot Springs Chamber of Commerce.



Central Avenue and West Mountain, from observation tower on Hot Springs Mountain.

regulations

Public buildings, signs, trees, flowers, shrubbery, rocks, and birds and other animals must not be disturbed, injured, or destroyed.

Fires are one of the park's greatest perils. Campfires are permitted only in designated sites. Take extreme care that all cigarettes or cigars are completely extinguished before they are thrown away.

Hunting is not permitted within the park.

Private operations. To solicit or sell anything, no matter how minor, is prohibited, except by persons holding contract with the United States. The excepted activities are those restricted to the bathhouses and the Hot Springs Observatory.

Advertising or distribution of placards or advertising matter is not permitted within the park.

Automobiles and motorcycles. Park roads are of mountain types and require careful driving at all times. Muffler cutouts must always be closed. Speed limit in the campground area is 15 m.p.h.

Horses have the right-of-way at all times and must be given the inside of trails when they desire it. Please be careful not to frighten them.

Commercial vehicles are prohibited from using park roads, except those which are operated under special-use permits or in connection with operation or maintenance of the park.

Pets are allowed if they are on leashes or otherwise confined.

Camping. Visitors using the campground must first register at the campground office. Automobiles and trailers must be placed in designated areas only. No structure of poles, lumber, or sheet metal may be erected, and camps must be kept clean. Use of the campground is limited to a 30-day period, except in summer when a special 14-day limit is in effect.

Park rangers are glad to answer inquiries at all times. They are here to help you.

administration

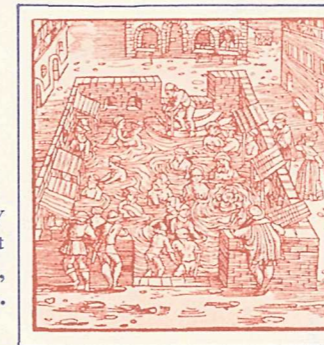
Hot Springs National Park, established on March 4, 1921, is administered by the National Park Service, U. S. Department of the Interior.

The National Park System, of which this park is a unit, is dedicated to conserving the scenic, scientific, and historic heritage of the United States for the benefit and enjoyment of its people.

Campground fees are collected under provision of the Land and Water Conservation Fund Act of 1965. The Recreation/Conservation permit will admit the driver and passengers of a private automobile. Daily and seasonal permits are available on a seasonal basis. Fees are not charged for persons under 16 years of age.

THE DEPARTMENT OF THE INTERIOR—the Nation's principal natural resource agency—bears a special obligation to assure that our expendable resources are conserved, that renewable resources are managed to produce optimum benefits, and that all resources contribute to the progress and prosperity of the United States, now and in the future.

U. S. DEPARTMENT OF THE INTERIOR
National Park Service



A 16th-century woodcut—bathing at Plombière-les-Bains, France.

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