



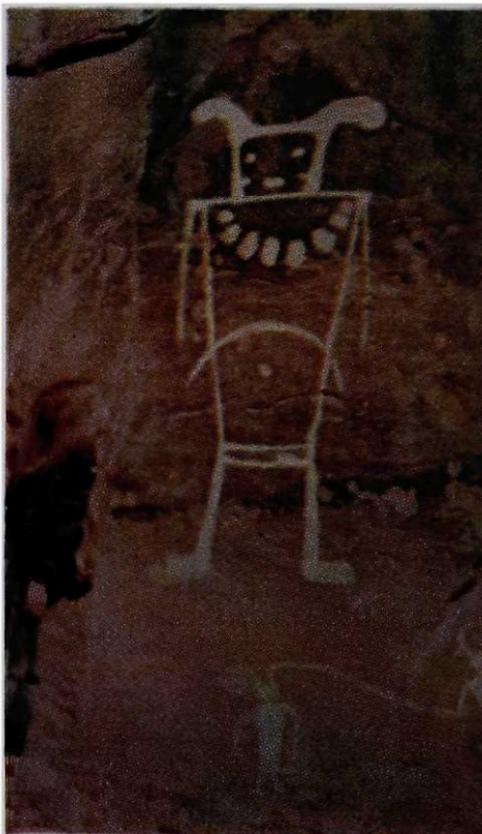
Moon Lake in the High Uintas, located directly south of King's Peak. Photo courtesy W. C. Lee.

Split Mountain from headquarters approach road. Courtesy Jess Lombard, Dinosaur National Monument.



Reliefing of dinosaur leg bone at fossil quarry. Photo Jess Lombard.

Petroglyphs on canyon wall near Island Park. Photo Jess Lombard.



Dinosaur National Monument (in the Uinta Basin) with its outstanding scientific and scenic interests is one of the most unique and colorful areas in the entire National Park System.

DINOSAUR COUNTRY

By *G. E. Untermann and B. R. Untermann**

Since countries, like people, have a background, it will be well to begin with the background of the Uinta country of northeastern Utah.

The real history of this area began with the initial uplifting of the Uinta Mountains, the largest east-west trending range in the Western Hemisphere, near the close of the Cretaceous period, along with the Wasatch and Rocky Mountain systems and the development of the depression on the south flank of the Uintas known as the Uinta Basin. Weathering and erosion during the sixty million years which followed have carved the spectacular scenery we enjoy in this region today.

Prior to the elevation of the Uintas this section of Utah was frequently occupied by seaways, over vast periods of time, in which were deposited the sediments destined to become the quartzites, sandstones, shales, and limestones forming the principal mountain mass. Subsequent erosion of the range supplied the sediments now comprising the Uinta Basin. The Uinta Basin is a natural depression lying in northeastern Utah and northwestern Colorado. It comprises all of Duchesne and Uintah¹ counties, Utah, the western half of Rio Blanco County, Colorado, and the southwest corner of Moffat County, Colorado. All the principal drainage is into the Green River.

* G. E. Untermann is director of the Utah Field House of Natural History, Vernal State Park, Vernal, Utah. Mrs. Untermann is the museum's staff scientist and technician and collaborated in the preparation of this article.

Human history in the Uinta country is of considerable antiquity. Indirect evidence would seem to indicate that primitive man in America may have strayed into the Uinta Basin in the course of his migrations some fifteen to twenty thousand years ago or earlier. Dates given for primitive cultures are somewhat flexible, so that a specific chronology is rather difficult to assume. Nor is it certain that such Folsom, Yuma, or Clovis-like points found in the area were left by these people or brought in later. But it is certain that man in the Uinta Basin is of great antiquity and, like ancient man in other parts of the Southwest, may have been here much earlier than now appears to have been the case.

Evidence of the presence of the Basin's first farmers is more direct and is documented by an abundance of well-preserved artifacts, skeletal remains, petroglyphs, and dwelling sites. These early residents (Basketmaker II) were already practicing small-scale irrigation at the beginning of the Christian Era, nearly two thousand years before the Mormon pioneers became the first Anglo-Saxons to divert water from streams for the growing of crops. The cultivation of corn and squash by these Basketmaker people marked the beginning of a sedentary life and the waning of a nomadic existence dominated by the pursuit of game as the mainstay of survival. The farmer had now begun to replace the hunter, who was relegated to a supplementary role in supplying the larder. No agricultural surpluses plagued these struggling farmers, who were forced not only to fight against the fickleness of nature but also to defend their meager stores from the raids of less enterprising enemies.

Basketmaker III (Modified Basketmakers who had advanced to pottery) and Pueblos bridged the gap between the early farmers and the ancestors of the Utes who formed the reception committee that greeted Father Escalante and his party — the first white men to enter Utah — on September 13, 1776, when they crossed the Green River five miles above the present site of the town of Jensen.

William Henry Ashley, trapper and fur trader of the Rocky Mountain Fur Company, came into the Basin in 1825 following beaver signs. Today his name has been given to Ashley Creek, Ashley Valley, Ashley National Forest, and Ashley "Falls" on the Green River.

Upon leaving the Basin in the winter of 1825-26, Ashley wanted to store some of his equipment until his return the following spring and asked a Ute chief if he thought his belongings would be safe. "Him safe," replied the chief, "no white man for thousand miles." The chief's interpretation of the relative "morality" of white man and Indian has merit, as any student of white and Indian relationships is aware. The

dime novel version of the Indian as a treacherous, thieving, murderous savage leaves much to be desired when compared with the white man's record of infamous dealings with native Americans!

In 1832 Antoine Robidoux, a trapper and fur trader of French descent, established Fort Robidoux at the junction of the Uinta and Whiterocks rivers, near the present site of Whiterocks. This was the first white settlement in the Basin and in Utah. It survived for twelve years, or until 1844, when it was burned to the ground by the Indians. Maddened by Robidoux's unprincipled rascality and cruelty and his enslavement of Indian women and children, the Utes sought a just revenge by leveling the fort. Historians have implied the regret that Robidoux was away during the burning of his post, hinting that greater justice would have been done had he also been destroyed. Robidoux, as is frequently the case with men of violence, died peacefully in bed in 1860 at the age of sixty-six.²

Although Mormon pioneers came to Utah in 1847, no attempt was made to colonize the Uinta Basin until the late summer of 1861. Brigham Young had heard glowing accounts of the area from traders and trappers, so in August of 1861 he announced that the Basin would be settled to care for the overflow arrivals in Salt Lake Valley, and also to precede the United States government to that section since it was being planned to establish an Indian reservation along the Uinta River. Early in September of that year a small scouting party set out to pave the way for the main group of settlers, but, failing to find the paradise described by the trappers, returned to Salt Lake City to report that the Basin was not as represented and that all the area was good for was to "hold the world together." Those settlers who were destined for the Uinta Basin went to southern Utah instead.

Upon recommendation of Caleb B. Smith, Secretary of the Interior, President Lincoln proclaimed a large part of the Uinta country an Indian reservation on the third of October, 1861. The first Indian agency was established in Daniels Canyon east of Heber in 1864. In 1865 it was moved to the Duchesne River at the foot of Tabby Mountain near the present site of Hanna. The third move occurred in the spring of 1868 when the agency was moved on east to Rock Creek, and in the same year, on Christmas Day, it was again moved to Whiterocks, between the Uinta and Whiterocks rivers a short distance above their confluence. Whiterocks, close by old Fort Robidoux, thus became the oldest site of continuous settlement in the Uinta Basin.

Major John Wesley Powell, in passing through the Basin during his Colorado River exploration of 1869, visited the Whiterocks Indian Agency on July 1 of that year to leave letters for mailing.

In the early seventies, white personnel from the Indian agency became the first settlers to take up homesteads off the reservation. By 1880 the population had become sufficient to organize Uintah County, which then also included the present Daggett County on the north side of the Uinta Mountain summit.

The opening of the Uintah Indian Reservation to homesteaders in August, 1905, was a shameful episode in the government's dealings with the American Indian. The reservation was established with the agreement that it belonged to the Indians and that only an affirmative vote by two-thirds of the male tribal members could ever open a portion of it to settlement. The Indians considered the reservation their home and did not want to part with any of it. But the Great White Father had failed them once more. For a full year before an effort was made to determine how the Indians felt about parting with a portion of their last remaining lands, Congress had already passed a law opening the reservation to homesteaders. The Great White Father had spoken and given the Indians no voice in deciding their own fate. Furs, minerals, and lands have always been a "justification" for the white man's pillage of the Indian's property.

Livestock and farming have long represented the basic economy of the Uinta Basin and remain the stabilizing factors down to the present time. These activities have been augmented by lumbering, mining (principally of gilsonite, a solid hydrocarbon), and by the discovery of oil when on September 18, 1948, Utah's first commercial well came into production in the Ashley Valley field, ten miles east of Vernal. Uintah County now (March 1, 1958) has approximately one hundred producing wells, mainly in the Red Wash and Ashley Valley fields. Drilling continues in the area.

The Basin contains vast potential resources in which are included an estimated fifty billion barrels of recoverable oil from the Eocene oil shales, between two and three billion tons of asphalt, and two billion tons of phosphate rock. With this wealth of undeveloped resources and with Flaming Gorge Dam now being constructed on the Green River, the Uinta Basin may well continue to help "hold the world together" — economically.

RECREATIONAL RESOURCES

Dinosaur National Monument:

One of the most unique and colorful areas in the entire National Park system is Dinosaur National Monument with its outstanding scientific and scenic interests. The Dinosaur Quarry, six miles north of Jensen, Utah, is world famous for the quantity, variety, and fine degree of preservation of the fossils it has produced. Twenty-three nearly complete skeletons were recovered, representing twelve different species of dinosaurs, most of which were beautifully preserved and as hard as the enclosing rock. The quarry and Split Mountain section nearby are replete with a great variety of material of geologic interest. The dinosaur fossils themselves occur in the Morrison Formation of Upper Jurassic Age and were laid down in an old stream channel one hundred forty million years ago. The quarry represents a sandbar or quiet cove in this ancient stream where the dinosaurs were washed in and lodged in large numbers just as driftwood lodges along sandbars in rivers today.

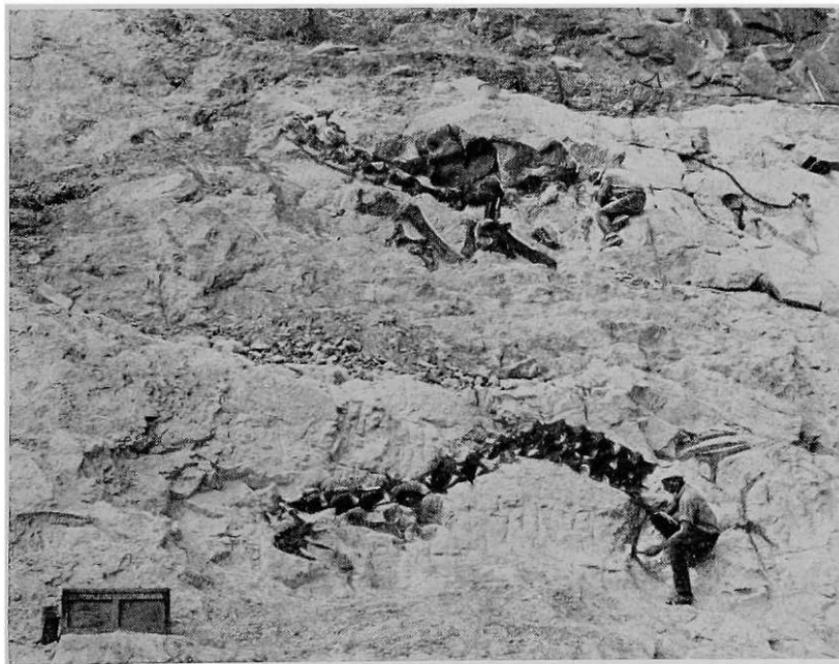


PHOTO COURTESY JESS LOMBARD, DINOSAUR NATIONAL MONUMENT

Relieving operations, dinosaur quarry. Several partial dinosaur skeletons and huge isolated bones have been outlined in high relief on the walls.

The history of the quarry began when Professor Earl Douglass of the Carnegie Museum, Pittsburgh, Pennsylvania, discovered outcropping fossil bones on August 19, 1909. The excavation of the bones developed the quarry, which was operated by the Carnegie Museum until 1923. In 1923-24 the National Museum, Washington, D.C., and the University of Utah collected material at the site. No fossils have been removed by anyone since 1924.

It has long been the plan to relief some of the remaining fossil material on the quarry face, leaving it etched out to form a striking exhibit-in-place. Not until national attention was focused on Dinosaur National Monument through the publicity it received as a result of the controversial Echo Park Dam debate were funds made available for the development of the quarry program, which has now become a part of the Park Service Mission 66. This ten-year program for the improvement of National Park Service areas has made several million dollars available for the development of Dinosaur. By June 15, 1958, the new Visitor Center and Museum at the quarry will be opened to the public. The north wall of this unique structure will be the quarry face itself, upon which are relieved the dinosaur bones, left in place just as nature deposited them. This will be one of the most striking exhibits to be seen anywhere.

During the operation of the quarry by Professor Douglass, he was plagued by theft of his fossil material and by vandalism. In the hope that he would have better control of the fossil deposits he tried to stake them out as a mining claim. However, he was told by uninformed personnel of the Department of the Interior, in Washington, that fossils were not minerals and that he would not be permitted to stake his claim. Actually, most fossils are replaced by minerals of one kind or another, so they are minerals; but official Washington was not aware of this, and the professor's petition was denied. As a last resort he sought to have the quarry set aside as a National Monument and was successful in this when President Woodrow Wilson so proclaimed the eighty acres comprising the quarry area, on October 4, 1915. In 1938 the Monument was enlarged to 204,000 acres to include the scenic canyons of the Green and Yampa rivers. As now constituted three-fourths of Dinosaur National Monument lies in northwestern Colorado, a portion included in what is known as the Canyon Unit.

The magnificent scenery of the Monument is due largely to the canyons of the Green and Yampa and adjacent areas. They vary in depth from twenty-five hundred to three thousand feet and range in

color through the spectrum, due to the many different geologic formations represented. Green River canyons are: Split Mountain, the mouth of which is but three miles from the quarry and is the site of the main campground; Whirlpool; and Lodore. Bear Canyon runs its length in the Monument on the Yampa. Boat trips, running the rapids through these canyons, are conducted by competent rivermen and are actually the best way for nature lovers to see the canyon country of the Monument. Secondary roads, some now being improved, give access to such scenic areas in the Monument as Island Park, Harpers Corner, Pats Hole, and the head of Lodore Canyon.

There are no accommodations for visitors in the Monument other than campground facilities. Vernal, nineteen miles west of the quarry, is the nearest town. Excellent motels, hotels, and restaurants are available there. Vernal is also the focal point from which to reach many other attractions in the eastern end of the Uinta Basin. It is the site of the State Museum, the Utah Field House of Natural History, which maintains a State Tourist Information Center. All visitors are urged to

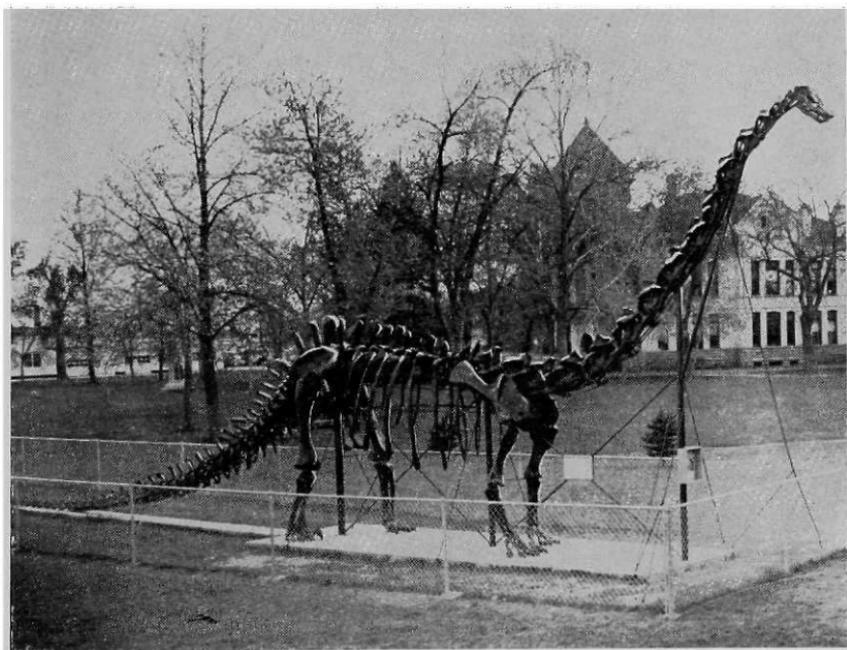
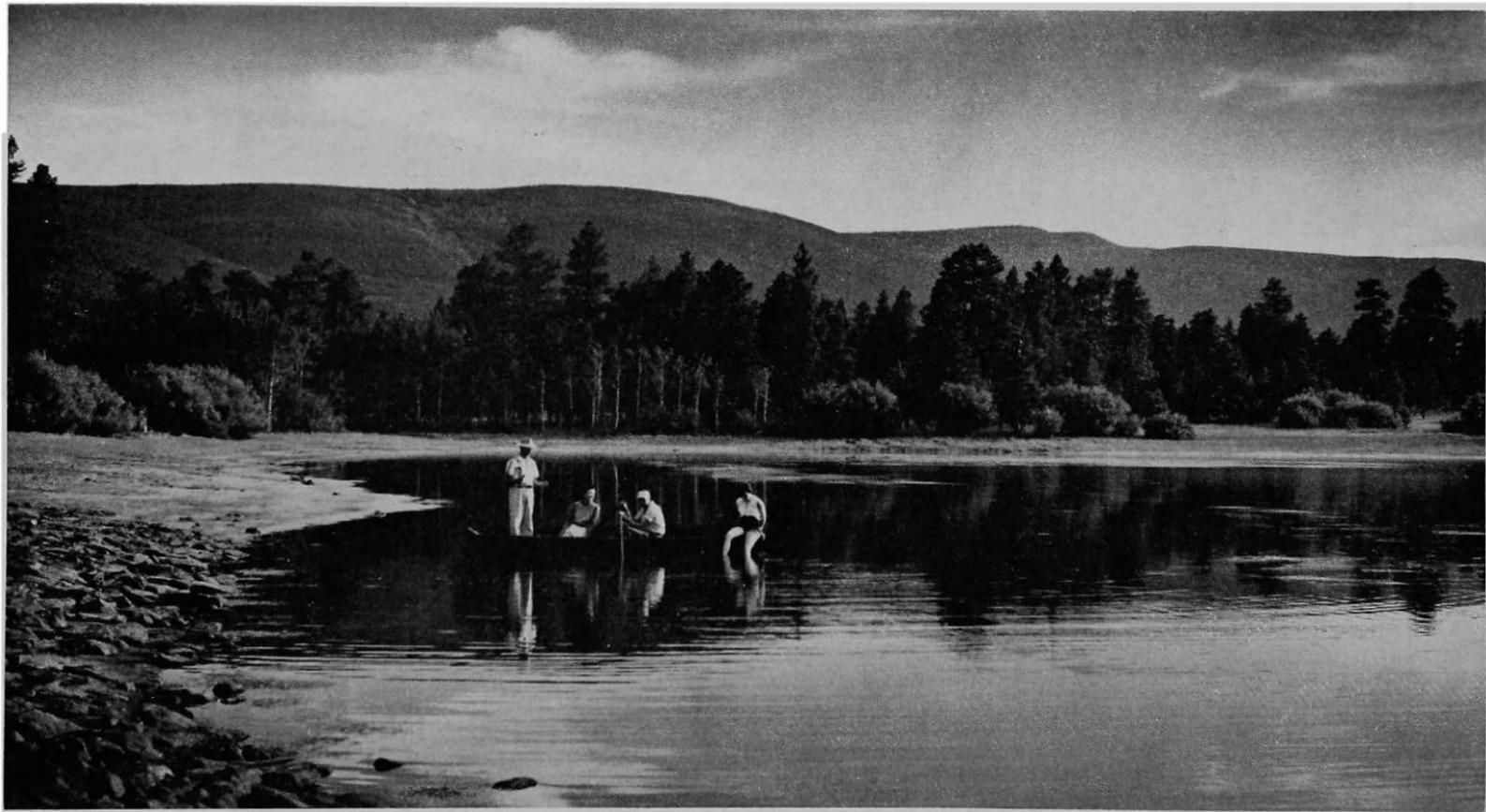


PHOTO COURTESY G. E. UNTERMANN

An authentic cement replica of Diplodocus, "Dippy" (76 feet long, 21 feet high at head), may be seen at the Field House of Natural History.



Green Lake in the High Uintas. Located forty-five miles from Vernal via the Vernal-Manila highway, tourist accommodations, saddle horses, and boats are available.

PHOTO HAL RUMEL

call at the museum for detailed information about Dinosaur National Monument and other points of interest in this area.

Ashley National Forest:

Within the boundaries of this great National Forest, which lies along both flanks of the Uinta Mountains and its summits, are included some of America's finest recreational areas. Scenic grandeur abounds on all sides, and its more than a dozen campgrounds and picnic areas make this beauty available to an appreciative public. Utah's highest mountain, King Peak (13,498 feet), along with many other 13,000 foot peaks, are towering guardians in Ashley National Forest. A half-dozen resorts and dude ranches cater to the needs of the visitor, all of them within the Forest. Lakes and streams are numerous, affording fine fishing and boating. Vernal, Roosevelt, and Duchesne, the three principal towns in the Uinta Basin, are the "jumping off" points to areas on the Forest. All of them have good tourist accommodations and good cafes. Duchesne and Roosevelt are gateways to the High Uintas Wilderness Area on the Forest, and to much of the western half of Ashley National Forest itself. Vernal, headquarters for the Forest, is the gateway to most of the eastern half of this magnificent area. Here too is the start of the Vernal-Manila Highway, the only road crossing the Uinta Mountains to Green River, Wyoming, and the only road on the Forest that extends from the south to the north side of the range. This is the road to take to see Brush Creek Gorge, Red Canyon of the Green River, and the Flaming Gorge Dam now under construction. From this road also the scenic Red Cloud Loop takes off, twenty-three miles north of Vernal, to wind its way through forest and mountains on the return to Vernal by way of picturesque Dry Fork Canyon. The first thirty miles of the Vernal-Manila highway includes "The Drive Through the Ages" with signs marking the geological formations.

Badlands of Eastern Utah:

Colorful "badland" topography may be seen on U.S. 40 between Roosevelt and Vernal, and also southeast of Vernal in the Red Wash Oil Field and on the way out to the Bonanza Gilsonite Mines. Both of these last-mentioned areas are reached over paved roads. The asphalt pits just west of Vernal are impressive.

Utah Field House of Natural History:

The fossil, geologic, and natural history values of the Uinta Mountain and Basin area, and the recreational, scenic magnificence, and out-

standing resource values of the state of Utah are revealed in the museum. The geologic record of this region is imposing. More than a billion years of earth history and a five-hundred-million-year life story are unfolded in the rocks of the Uintas. Seventy-five different kinds of mammals, two hundred fifty species of birds, and over a thousand varieties of plants are represented among the present-day living organisms of this area. At the State Tourist Information Center in the museum, the visitor is oriented with respect to local and state-wide attractions. Tours are outlined and every effort is made to make his stay in Utah a memorable one.

NOTES

¹The National Board of Geographic Names applies the spelling "Uinta" to mountains, streams, and other geographic features, and the spelling "Uintah" to political subdivisions such as counties, reservations, etc.

²It is interesting to note that he died at the home of an elder brother, Joseph, in St. Joseph, Missouri. Joseph had founded the city as a trading post on the Missouri River in 1800. The place was known as Robidoux until 1843, when Joseph himself changed the name to St. Joseph. The family was originally from St. Louis.