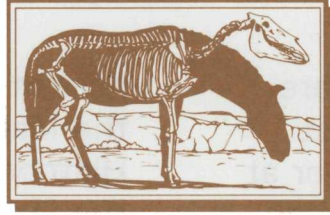

HAGERMAN FOSSIL BEDS NATIONAL MONUMENT

The

FOSSIL



RECORD

SUMMER, 1997

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VISITOR INFORMATION

The Visitor Center will start its summer schedule on Memorial Day weekend, May 24, opening 7 days a week. The Visitor Center is located along Highway 30 in Hagerman, across from the High School. Hours are 9:00 am to 5:00 p.m.

FOSSIL DAYS - Bones, bones, uncovering bones. Come see the fossil excavation on Saturday, May 24 and Sunday, May 25. Hagerman Fossil Beds National Monument is offering **free** bus tours to the famous Smithsonian Institution "Horse Quarry."

The tours are offered on a first-come, first-serve basis. Visitors should meet at the Amalgamated Sugar L.L.C. Beet



Dump at the top of Bell Rapids Grade at the intersection of 5400 North and 400 East.

Tours will last approximately one hour and fifteen minutes and will begin promptly at 9:00 a.m., followed at 10:30 a.m., noon, 1:30 p.m., 3:00 p.m., and the last tour will be 4:30 p.m. Stop in our Visitor Center for directions and to view our slide program.

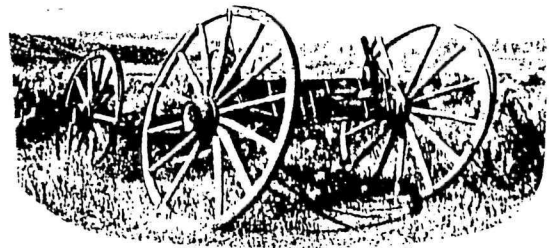
SUMMER TOURS - If you miss the tours to the famous "Horse Quarry" on Fossil Days, don't despair. Just gallop on over to the Visitor Center this summer for a Ranger-guided tour of the excavation project. Tours will be offered on Saturday and Sunday mornings at 9:30 throughout the summer. Additional tours may be reserved for groups of 10 or more during the week when staff levels allow.

River tours are available through the following private companies:

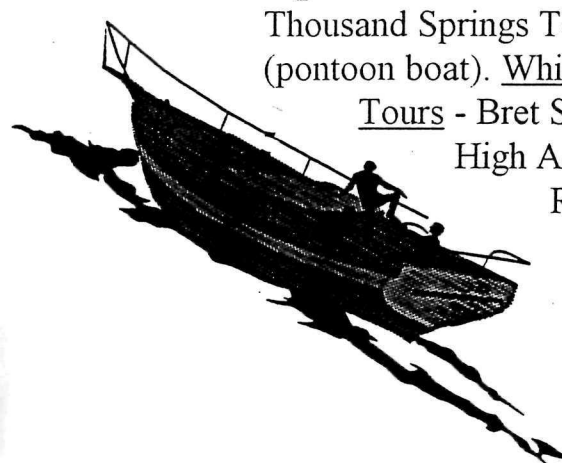
Monument Tours - Idaho Guide Service (pontoon boat or canoe); and
Thousand Springs Tours (pontoon boat). White Water Tours - Bret Silver; and
High Adventure River Tours.

RANGER PATROL - Please remember the Horse Quarry is located within the Paleontological Research Zone. Visitors must be accompanied by a ranger to view the excavation.

Motorcyclists have again gone through the boundary fence and created new ruts and tracks on the steep slopes of the Yahoo Creek drainage. This will undoubtedly lead to additional erosion of the area. This area contains known archeological sites including a hearth with burnt bone which may have been used as a tool making or seed "processing" area. Sites such as this have special protection under the Archeological Resources Protection Act of 1979. Penalties for looting or destruction of archeological sites include up to 5 years imprisonment, up to \$250,000 in fines and forfeiture of any materials used in connection with the crime, including vehicles.



The ruts and artifacts of the Oregon Trail which go through the Monument are also considered an archeological resource. Please report any trespass, or unlawful collecting (looting) to a staff member. Rewards may be offered for significant cases.



ZONE CLOSURES - During the General Management Plan process, the general public strongly supported the concept of "use" zones on the Monument to ensure proper use. Several of these zones called for an end to unlimited public access to protect the fossils and other resources. The Hunting and Fishing Subzone was not affected by these measures. The remaining zones are closed to public access unless accompanied by a Park Ranger or with an approved permit.

The closed zones are the Paleontological Research Zone, the Park Development Zone, the Natural Environment Zone and the Cultural Zone. For a copy of the General Management Plan, you may telephone (208) 837-4793.

RESOURCE MANAGEMENT

COTTONWOOD

RESTORATION - Last Fall's cottonwood stem plantings came through the winter with minimal damage from porcupines and beavers. The frost was not as kind, however. Many of the tops were killed by frost but may resprout further down the

stem. About fifteen percent retained healthy buds and leafed out in early May. Additional spring growth cuttings were also planted and those leaves were affected by the late frost, but not as severely as the ones that overwintered. Survival will be monitored and more cuttings planted as needed.

FIRE RESTORATION - The reseeded fire area is lush with spring grass growth. The new growth should provide high quality forage for deer, rabbits, and rodents. Erosion was minimal as measured by sediment gauges at the bottom of each ravine.

MONUMENTAL SCIENCE

Check Presented

On May 13th, Canon U.S.A. in partnership with the National Park Foundation presented a check for \$50,000 to Hagerman Fossil Beds National Monument as a grant to reopen the Hagerman Horse Quarry. This grant program "Expedition into the Parks" is designed to help conserve and protect natural resources

in our National Parks. The one million dollar program is the largest corporate gift ever provided to the Foundation for natural resource conservation. Other National Park Service areas that received grants include Yellowstone National Park, Canyonlands National Park, Dinosaur National Monument, Capital Reef National Park, Death Valley National Park, Santa Monica Mountains National Recreational Area, Oregon Caves National Monument, and Mount Ranier National Park.

CRITTER CORNER

The Fossil Turtles of Hagerman: Just Shells of Their Former Selves

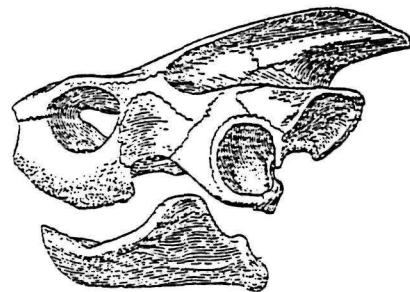
By Greg McDonald,
Monument Paleontologist

Idaho is not known for its turtles. In fact, many people may not be aware that there is even a turtle living in the state, the painted turtle, found only in the panhandle. Since there are no turtles living in any parts of the Snake River drainage today, it may be somewhat of a surprise to learn that pieces of turtle shell are one of the most common fossils found at Hagerman Fossil Beds and that two

types of extinct fossil turtles have been found here.

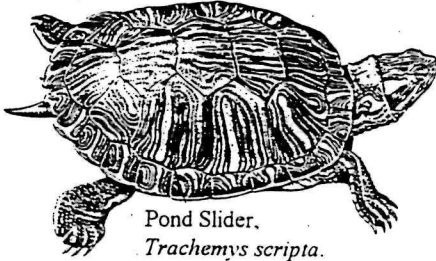
Turtles were first described from Hagerman in 1933 by Charles W. Gilmore, a paleontologist at the Smithsonian, better known for his work on dinosaurs and fossil lizards. The specimen, a complete shell plus the skull and jaw and most of the limb bones, was found in 1930 during excavations at the Horse Quarry. To find a complete shell of a turtle is unusual in itself since the shell is composed of numerous distinct bones (about 59 depending on the species), which often separate after the animal dies, however, to find the other bones of the skeleton as well, is an extremely rare occurrence. Since most pieces of turtle found at the monument are individual bones of the shell, this animal must have been buried very quickly after its death before the bones could become scattered.

Gilmore described the animal as a new species of the pond turtle genus Pseudemys, Pseudemys idahoensis,



Skull of *Pseudemys idahoensis*.

although recent research places this animal in the genus Trachemys, the slider turtles. Only one species of Trachemys is present in the United States today, Trachemys scripta, better known as the red-eared or pond slider.



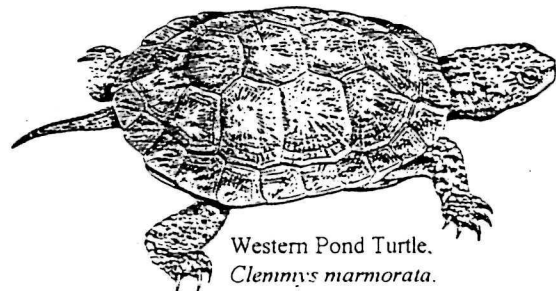
Pond Slider,
Trachemys scripta.

The living slider is found along the Atlantic Coast from Virginia to northern Florida and westward to southern Texas and northward to northern Kansas, Missouri and Illinois. Outside of the United States this species is known from Mexico, Central America and South America. Fossil specimens of Trachemys are known from an equally wide range of localities and include Florida, Kansas and Texas as well as Idaho. It is very likely that Trachemys idahoensis is ancestral to the living Trachemys scripta.

The second type of turtle found as a fossil at Hagerman is an extinct species of the Western Pond Turtle, Clemmys owyheensis. The living species of Clemmys, C. marmorata, lives along the Pacific Coast from southwestern British Columbia to northern Baja California with an eastern population in the Truckee and

Carson Rivers of Nevada. The presence of the Nevada population between Hagerman and California is further evidence for the former drainage of the Snake River out of Lake Idaho across northern Nevada and into northern California.

The living species of both Trachemys and Clemmys are thoroughly aquatic turtles that seldom venture on land. That their close relatives are common as fossils at Hagerman fits our interpretation, suggested by many of the other animals such as beaver, muskrat, otter, frogs and the waterfowl, that 3.5 million years ago an extensive wetland habitat existed in the area. Their disappearance from southern Idaho probably resulted from the increasing drying and cooling of the region and loss of suitable habitat, possibly caused by the continued uplift of the Cascade Mountains and the resulting rain shadow in Idaho. Although not present in Idaho today, studies of their surviving descendants in other areas can provide us with an insight into what the environment was like in southern Idaho 3.5 million years ago.



Western Pond Turtle,
Clemmys marmorata.

SUMMER SCHEDULE OF TOURS

All tours will begin at the Visitor Center, located along Highway 30, at 9:30, unless otherwise noted. Participants should have sturdy hiking boots, sunscreen, and water. Be prepared for variable weather. You will need your own vehicle which should be able to travel along gravel roads. There are no facilities on the Monument. Arrangements should be made in advance for large groups. Please call (208) 837-4793.

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| Saturday, May 31 | Horse Quarry Excavation Tour - Here is your chance to see an actual dig! Field crews will be excavating the famous Smithsonian Institution "Horse Quarry" where the Hagerman Horse was first uncovered. |
| Sunday, June 1 | Horse Quarry Excavation Tour |
| Saturday, June 7 | National Trails Day Hike - 9:30 at Visitor Center
Participants should have sturdy hiking boots, sunscreen, and water. Hike will last two to three hours. |
| Saturday, June 7 | Horse Quarry Excavation Tour |
| Sunday, June 8 | Horse Quarry Excavation Tour |
| Saturday, June 14 | Horse Quarry Excavation Tour |
| Sunday, June 15 | Horse Quarry Excavation Tour |
| Saturday, June 21 | Horse Quarry Excavation Tour |
| Saturday, June 21 | Oregon Trail Living History Evening Tour - 7:00 pm at Visitor Center. Program will continue to the Oregon Trail Overlook. Program should last approximately one and one-half hours. Participants may want to bring folding chairs. |
| Sunday, June 22 | Horse Quarry Excavation Tour |

- June 28 Horse Quarry Excavation Tour
- June 29 Wildlife Watch Evening Tour - 8:00 pm at the Visitor Center.
Program will continue to the Snake River Overlook.
Participants should bring flashlights, binoculars, possibly
jackets.
- July 5 Horse Quarry Excavation Tour
- July 6 Horse Quarry Excavation Tour
- July 12 Horse Quarry Excavation Tour
- July 13 Horse Quarry Excavation Tour

To provide a unique visitor experience, the National Park Service is cooperating with commercial boat operators to provide guided tours of the Monument along the Snake River. To make a reservation, phone -

 Thousand Springs Tours at 837-4822;
 Idaho Guide Service at 734-4998;
 High Adventure River Tours at 733-0123;
 Bret Silver at 837-6253.