

## Loch Ness search sponsored by Times

In a revival of what it calls "a lately quiescent tradition," the New York Times is co-sponsoring a scientific expedition—the search for the Loch Ness monster. By doing so, the paper has secured the exclusive first-publication rights to the films, video tapes, charts and other data produced by the scientists involved, as well as exclusive rights of access to the boat on which the work is taking place.

Speculation over the monster's existence surged late last year with publication of new photographs showing fuzzy outlines of a large object apparently swimming submerged in the Loch (SN: 12/20/75, p. 391; 4/17/76, p. 247). The pictures and accompanying sonar data were gathered by the Boston-based Academy of Applied Sciences, a private organization that is the other sponsor of this summer's Loch expedition.

John N. Wilford, director of the Times's science news section, is reporting on the day-by-day progress of the expedition and is helping out with some of the routine work. Installation of the camera equipment, suspended from a boat anchored some 300 feet off the Loch's shore, was completed June 6 and the expedition members have settled down for an inde-

terminate wait for the creature.

Peter Millones, an assistant managing editor on the Times, told SCIENCE NEWS that part of the rights for access to the boat had been sold to NBC, which will be allowed to film work in progress; but the Times will distribute film and videotapes made by the underwater cameras. Other news organizations will have to wait 24 hours after a discovery before the Academy of Applied Sciences can distribute a limited number of pictures to them.

Newspaper-sponsored scientific expeditions were once fairly common—the Times co-sponsored Admiral Byrd's expedition to the South Pole in 1929—but the practice has fallen off as costs of such research have escalated and as criticism has arisen concerning the ethics of a news organization reporting on its own project while excluding other members of the press. The present Loch expedition is expected to cost something in the neighborhood of \$75,000, a relatively low figure by today's standards because most of the labor is voluntary and some of the equipment was donated. Asked whether the ethical considerations were discussed in the Times's decision, Millones said: "We thought this was a reasonable and proper thing for a newspaper to get involved with. . . . We will handle it the same as any other news." He would not say how much money the paper is paying for its rights. □

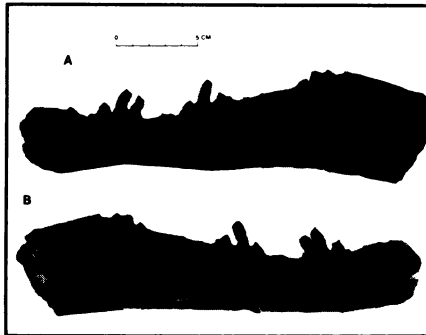
## Prehistoric gift for bicentennial

America has just received its most unusual birthday "gift" from James H. Madsen Jr. of the University of Utah: *Marshosaurus bicentesimus*, a new genus of dinosaur named in part for the nation's bicentennial. The recent identification of the carnivorous theropod (two-legged) culminated a three-year project assembling the bits and pieces of fossil bone retrieved from central Utah's Cleveland-Lloyd quarry. In the Spring issue of UTAH GEOLOGY, Madsen describes the ancient reptile as having been about six-feet tall and 15- to 18-feet long.

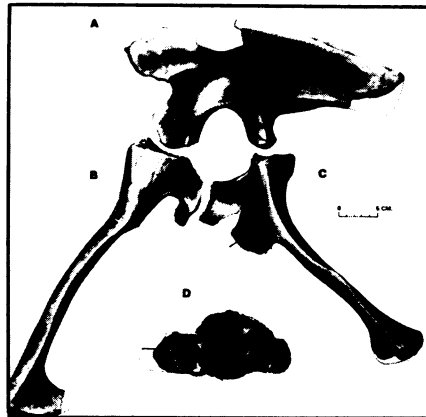
The skeletal find, parts of which have been collected since 1960, include the tooth-bearing elements of the skull and jaw and complete pelvic girdle. These items in particular are "very diagnostic," says Madsen, and are sufficient to "warrant description" of the dinosaur. Madsen estimates the animal weighed about one-half ton. Judging from certain qualities of its teeth, the Late Jurassic beast was a predator.

Madsen says there has been a recent upsurge of scientific interest in dinosaurs partly in response to recent evidence that dinosaurs may have been more warm-blooded than traditionally acknowledged.

This newest genus is also named after



Reconstructed left jaw bone of *Marshosaurus bicentesimus* and its pelvic bones.



the renowned 1870s paleontologist Othniel Charles Marsh of Yale and is one of 22 genera of dinosaurs found thus far in Utah. □

## 'Fingerprint' test for bloodstains

Although a criminal, as the saying goes, always leaves something at the scene of the crime, it is not always fingerprints. A current objective of forensic science research, therefore, is to find the hidden "fingerprints" in blood, hair, skin, semen and other biological clues.

Two Wichita State University researchers, George H. Sweet and James W. Elvins, report in the June 4 SCIENCE a new approach to individualizing human bloodstains. They applied an already developed laboratory technique—crossed electroimmunodiffusion (CEID)—to bloodstains from five male and five female college students. This technique, Sweet explains, first separates the blood proteins (antigens) with electrophoresis then separates them in a second dimension, on agar containing antibodies. From the resulting visual patterns of peaks and troughs, the team was able to identify blood from each of the ten students. There was also a significant difference in peak heights between males and females.

Although forensic researchers would have to standardize the identification peaks first, the CEID technique shows the best potential yet for fingerprinting bloodstains, Sweet says. □

## Jacques Monod, prominent biologist

Jacques Monod, premier molecular biologist, Nobel laureate and director of the Pasteur Institute in Paris, died last week at his home in Cannes, France. He was 66 years old.

Monod and Pasteur Institute colleague François Jacob proposed the genetic operon model in 1961. The discovery and explanation of the operon—a group of closely linked genes which are turned on and off to control production of enzymes—stands as one of the great achievements of molecular biology. For this and other work in the field, Monod, Jacob and André Lywoff, also from Pasteur Institute, were awarded the 1965 Nobel Prize for medicine or physiology.

In 1970, Monod published his controversial essay *Chance and Necessity*, an exploration of the logical impacts of modern biology on religion and traditional philosophy. Monod believed that human evolution was a chance event, and that this is born out by the modern elucidation of biological structure and function on the molecular level. Much of traditional philosophy, centering on the special role of humans and the uniqueness of consciousness, would be invalidated by such a belief in chance human origins and evolution, he felt. Monod's essay was respected but widely disputed. □