

## **University of Wisconsin-Madison**

## **Department of Geology and Geophysics**

Lewis G. Weeks Hall 1215 W. Davton Street Madison, Wisconsin 53706

Museum Office: 608 262-2399 Tour Information: 608 262-1412 FAX: 608 262-0693 E-mail: kwwestph@facstaff.wisc.edu Home page: www.geology. wisc.edu/museum

# Annual Report for 1999

### Visitors In 1999, the Museum

proved, once again, a popular destination for school groups and the general public. Tour coordinator Haddie Heitkamp kept busy matching tour requests with the schedules of our guides. In addition, the Museum is becoming increasingly recognized as a valuable resource for university courses in the geological and biological sciences. We hosted about 16,000 visitors last year.

#### **Fossil Vertebrates**

Graduate student Christopher Ott has been put in charge of the Fossil Preparation Lab. In April, Chris unveiled his expertly-crafted balsa wood model of the flying reptile, Pteranodon. The reconstruction was based

on material that was collected in recent years from the Cretaceous-age Niobrara Chalk deposits of northwest Kansas. The Pteranodon, its wings spreading over 20 feet, now soars above the Mastodon and the Edmontosaurus dinosaur in the Museum's vertebrate hall.



Skeleton of the flying reptile Pteranodon. The full-size balsawood model and its designer Christopher Ott.

Lisa Buckley has been busy identifying the Museum's collection of theropod (meat eating) dinosaur teeth, ranging from those of gracile raptors to massive ones of Tyrannosaurus rex. Once the rock matrix had been removed from some of the poorly-preserved bones labelled Tyrannosaurus, it was discovered that they

Chris Ott and student aide Lisa Buckley led a two-week expedition exploring the badlands of eastern Montana for bones to supplement our Triceratops reconstruction project. The 5-footlong skull is scheduled to be on exhibit by the end of the year 2000. A \$3,000 grant from the University's Natural History Museums Council provided funds for the preparation, identification and cataloging of a significant part of our collection of fossil vertebrates. In the process, we identified the partial skull of a Leptoceratops dinosaur from the Cretaceous Hell Creek Formation of Montana, a genus that has never before been found in these deposits.

were actually the bones of a *Triceratops*. At this point, we are not sure as to the identity of the *"Tyrannosaurus"* bones that are still encased in plaster jackets awaiting cleaning and preparation.

#### **Teacher Training**

The Paleontology Field Experience and Curriculum Development program, funded by the Howard Hughes Medical Institute, the University of Wisconsin-Madison's Graduate Division, and the Department of Geology and Geophysics has successfully completed its second year. The program is overseen by Joe Skulan assisted by high school teachers, Marilyn Hanson and Steve Bower. Its centerpiece is a three-week intensive training program in June. The six teachers worked part of the time at the Museum and in various labs on campus, and went on a one-week expedition to Kansas and Wyoming recovering mosasaur bones and mapping dinosaur tracks. The results of the "Paleontological Experiences" have been presented at several national science teachers conventions.

#### The Museum and the Web

Meanwhile, the Museum's project assistant Matt Kuchta catalogued some of the museum's collections and entered the data into our computer. Matt

#### Lectures, Public Programs

As part of the University's On the Road program, Museum Director Klaus Westphal gave several slide presentations on the Museum's dinosaur expeditions and displays. He also took part in the University's Sesquicentennial celebration with a dinosaur program at the Elvehjem Museum of Art. Other outreach included participation in a "Quarry Day", a day-long public event at Madison's Yahara Quarry, with an exhibit of fossils that can be found in Wisconsin. This year again, the Museum was one of the destinations for children enrolled in the Nature Passport Program. The free passports are a way to motivate younger children to explore educational nature programs and facilities in the area. During that time, enjoyed responding to the many questions raised by the inquisitive youngsters.

The Museum's Annual Open House featured the unveiling of the flying reptile *Pteranodon*, slide programs on Planet Mars, and the ever-popular Rock Pile for Kids. Many of the specimens for the Rock Pile were generously supplied by Burnie's Rock Shop, Madison. Plan B Design Studio of Hazel Green, once again made dinosaur face masks with our youngest visitors.

is also in the process of updating the Museum's web page with an improved text and many new pictures. The virtual Museum can be visited at www.geology.wisc.edu/ ~museum.

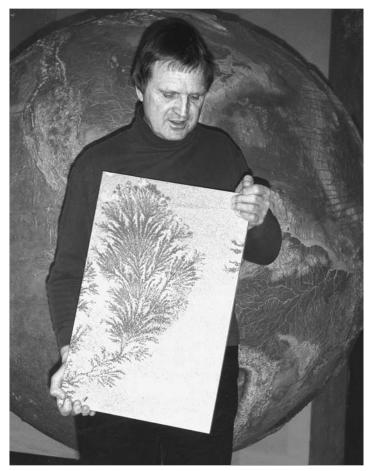


The Burgess Shale Exhibit (Haddie Heitkamp, Matt Kuchta).

#### Exhibits

This year's Special October Exhibit, "Colorado Classics", featured a collection of colorful minerals from some of that state's famous historic mines. The collection, on loan from the Denver Museum of Natural History, was brought to us by UW-Madison alumnus James Hurlbut.

Fossils from the Cambrian-age Burgess Shale of British Columbia, Canada, famous for unusual preservation of trilobites and softbodied organisms, are featured in a new exhibit. The exhibit was designed by Jonathan Hendricks and Matt Kuchta.



Dendrites, a mineral formation on quartzite from Brazil (Klaus Westphal).

The small educational display was first taken to Tucson to represent the University of Wisconsin at the International Gem and Mineral Show.

#### Contributions

While some major financial contributions (Dr. and Mrs. Kenneth W. Ciriacks, Santa Fe, New Mexico; David Jones, Worthington, Minnesota; Ellis Taff, Madison; the Amoco Foundation, and many others) were used to support the dinosaur program and educational outreach. Other funds were dedicated for the purchase of specimens for our exhibits. A major contribution from Laura Linden, Madison, allowed for the acquisition of several specimens, including two gold samples, and green fluorite crystals from China. The Friends of the Geology Museum contributed a large Brazilian quartzite slab covered with the moss-like filigree of black dendrite minerals. James R. and Helen B. Ruchti, Edgerton, presented the Museum with a large ammonite from the Jurassic-age black shales of Germany. Three large rock specimens from the South Dakota Black Hills, including a rough sample of rose quartz, were donated by Henry and Elizabeth Pringle, Madison. University student Matt Kures donated a cephalopod fossil that he had collected on a recent geology fieldtrip.

#### Needs

An external review of the Department of Geology and Geophysics was

highly complimentary of the Museum but deplored the low funding level. The Board strongly recommended the establishment of an endowment for the Museum. The most pressing need is that of a permanent assistant. Other needs include the long-overdue replacement of the display case lights, and funding for a secure cabinet to exhibit our extensive gemstone collection. We will try, with the help of the Department, to address these needs in the year 2000.

#### **Prospects for a Museum Expansion**

The Department of Geology and Geophysics is actively pursuing plans for a building expansion of Weeks Hall. The envisioned addition would increase the Museum's exhibit space and also provide for two additional offices and for specimen storage. The Museum owes much of its success to the

**Friends of the Geology Museum, Inc.**, a group of individuals that are enthusiastic about minerals, rocks, fossils, and the earth sciences in <sup>Fri</sup> general. The non-profit organization supports the Museum's expeditions, the restoration of dinosaur bones and other



fossils, the occasional acquisition of specimens for display, and the Museum's educational outreach programs. The Friends owes special thanks to Suby van Haden, Certified Public Accountants, for donating their time to produce a financial statement that will be helpful for the Friends' planned fund-raising efforts.

#### The Geology Museum gives thanks to its staff and the many dedicated volunteers

Steven Bower, Teacher Training Program Anna Bradshaw, tour guide Lisa Braun, tour guide Cheryl Buchwald\*, tour guide Lisa Buckley, volunteer, fossil preparator, expedition member Christin Engstrom, tour guide Susan Flickinger\*, tour guide Lou Goodman, volunteer, fossil preparator, expedition member Maggie Guzinski, volunteer, fossil preparator, expedition member Marilyn F. Hanson, Teacher Training Program Haddie Heitkamp, tour guide and tour coordinator Jon Hendricks\*, volunteer, fossil preparator Julie Hill, tour guide Amanda Holdorf, volunteer, fossil preparator Geoff Hosack\*, volunteer, fossil preparator Ryan Jakubowski\*, tour guide Reuben Johnson, tour guide

Robin Kodner, tour guide Richard Krause\*, volunteer, fossil preparator, expedition member Matt Kuchta, project assistant Edward Mathein, volunteer, fossil preparator Shasta McGee, volunteer, fossil preparator Christopher Ott, student assistant, fossil preparator, expedition member Christine Pagelsdorf, tour guide Craig Pfister, fossil preparator D. Lyle Setwyn, tour guide Joseph L. Skulan, instructor in the Teacher Training Program Ellen Stephenson\*, volunteer, tour guide David Suls, volunteer, fossil preparator, expedition member Ian Sweeney, volunteer, fossil preparator Ellis Taff, volunteer, senior tour guide Susan Werther, volunteer, Annual Report editor Melissa Wraalstad, tour guide

\* indicates no longer with the Museum

#### ... and the Friends of the Geology Museum,

John R. Rettig, President Richard Emerson, Vice President John Evans, Treasurer, Maxine Triff, Secretary

Thank you! Dr. Klaus W. Westphal, Director