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Winter Wonders: Record Snow, Chinese VIPs, Barricades













A month of pictures, clockwise from upper left: Vice Premier Teng Hsaioping touches the moon rock at NASM; Madame Cho with Freer Director

Thomas Lawton; Rosalynn and Amy Carter show Madame Cho around the Zoo; Metrobus blockade outside A&I; wildebeests (right) and tapir in the snow

at NZP; farmers visit "1876." Photo credits: Upper left: Richard Hofmeister; upper right: Stephanie Faul; Zoo photos: Stan Barouh; A&I photos: Susan Foster.

By Linda St. Thomas

The Smithsonian museums were forced to close their doors Monday and Tuesday, Feb. 19 and 20, after the Great Blizzard of '79. It was the first time in at least 50 years that the museums were closed for 2 consecutive days because of weather conditions. However, in recent weeks museums on the Mall did manage to cope with several less severe snow and ice storms, barricades which kept the tractors of protesting farmers on the Mall and surrounded Smithsonian buildings and visits from Chinese Vice Premier Teng Hsaio-ping and his wife Madame Cho Lin, both accompanied by hundreds of news people.

The museums reopened Wednesday, Feb. 21, although icy road conditions made it difficult, if not impossible, for staff and visitors to get to the Mall. The Zoo remained closed through Wednesday. It also had been shut down for one full day and several half-days earlier in the month.

To add to the problems, at about 4 p.m. Friday, Feb. 16, a water pipe in the Museum of History and Technology burst, spilling more than 100,000 gallons of water into the east section of the ground floor and basement. The ruptured pipe was replaced Friday evening and the building reopened Saturday morning.

The big storm began about 3 p.m. Sunday and continued through the night. By midnight, when the museums' guards normally change shifts, there already was an accumulation of about 4 inches and it was snowing heavily. Guards were asked to re-

(See 'February,' Page 6.)

Fellowships For Working Research

The Regents Fellowships, approved at the last Regents meeting and reported briefly in the February Torch, are designed to attract distinguished scholars to conduct programs of working research at the Institution, according to Gretchen Gayle Ellsworth, director of the Office of Fellowships and Grants.

The new fellowships, Ellsworth said, will not be awarded on the basis of "a cutand-dried annual competition, with specific qualifications and award amounts laid out by formula, as are the pre- and postdoctoral fellowships we award every year. The new grants can be given as qualified individuals come to our attention."

Staff members are encouraged to suggest names of eligible scholars to their bureau directors, who will make final nominations. OFG will also place announcements in appropriate scholarly journals. Final approval of each fellowship will be given by Secretary Ripley.

Funding of up to \$100,000 per year will come from unrestricted trust funds and should continue for 5 years if the program proves itself. "We will be able to award a stipend of up to \$30,000 each to one or two people for 12 months. In addition, there will be a relocation allowance and research support in the form of additional personnel, if necessary."

Fellowships in some cases may be awarded to scholars planning to use Smithsonian collections of special significance in their research, but fellowships will not necessarily be related to collections, Ellsworth added.

Mahon Named Regent Emeritus

Former Congressman George H. Mahon of Lubbock, Texas, who has served on the Smithsonian Board of Regents since 1964, was named Regent Emeritus at the Jan. 22 board meeting.

Mahon retired from the House in December after serving for 30 years. For the past 14 years, he was chairman of the Appropriations Committee.

The Regents decided that because of his long and faithful service to the Institution, Mahon would be invited to serve as an advisory member of Regents committees and to perform other services as the need arises. Mahon is the first Regent Emeritus in the Smithsonian's 132-year history.



An exuberant Charlotte Fairchild belts out a song.

Auditorium, with New York director Ernestine Perrie watching each performer and offering suggestions, technical director Harold Closter fiddling with spotlights while shouting instructions to the light crew and Michael Moschen strolling across the stage juggling three balls as if it were the easiest thing in the world. Just to add to the confusion, comedians Joe Silver and Paul singing, dancing shows were offers interested clean up their thing "vaudev that anything classy." "This type

ing to do with the script.

James Morris, Division of Performing Arts director, who wrote and produced the show, busily conferred with Perrie about the scripts, music, slides and a thousand other details. This was the second time Perrie worked on a DPA production—she directed last season's Hutchinson Family concert at the Renwick.

Dooley kept cracking jokes that had noth-

Work on the DPA production of "Vaudeville!" began last summer when staff researchers took a close look at the old-time acts. Traditionally, performers would play directly to their audiences—even when one comedian was addressing the other on stage, he would face the audience to deliver his lines. In the DPA show this technique was used by Joe Silver and Paul Dooley in the classic Bert Wheeler sketch, "My Dog Had Pups."

The word "vaudeville," some experts believe, comes from the French vau-de-Vire or valley of the Vire River in northeastern France where sprightly songs were composed and sung in the 15th century. Early American versions of what had become French variety shows included singing, dancing and comedy acts. But the shows were often vulgar, so theater managers interested in family audiences tried to clean up their acts and called the whole thing "vaudeville," probably in the belief that anything sounding French had to be classy.

"This type of entertainment presents a special challenge for performers and producers," Morris said. "Vaudeville acts were more economical than many of our performances are today. A performer had only about 5 minutes to get on stage, introduce his number, interest the audience, build the act to climax and get off stage. Obviously, every word, every gesture and every piece of music had to fit into the act perfectly because there wasn't a second to spare."

Most vaudeville shows had about 10 acts, a mixture of comedy monologs, singers, dancers, magicians, jugglers, comedy sketches, trained animal acts and acrobats. Morris and Perrie, in true vaudeville tradition, prepared a show that had a little bit of everything except the animals.

Set designer Hugh Lester of Arena Stage transformed Baird Auditorium into a vaudeville house reminiscent of Washington's old B.F. Keith's Theater, and DPA staff members helped find authentic props for the show. Antique music stands with fancy scroll work and lights were discovered by music advisor James Weaver who spotted them one evening at an embassy and borrowed them for the two weekend perform-

ances of "Vaudeville!"

Charlotte Fairchild, an old vaudeville performer herself, opened the show with a traditional sing-along number "Take Me Out for a Joy Ride" and later sang such songs as "For Me and My Gal" and "I Don't Care."

Comedian Sid Stone didn't need much practice for his "Pitchman" act after 40 years in show business and some 5 years of doing the act on Milton Berle's TV show. Stone's sales pitch routine had everything from the corniest gags to some timely jokes about the President.

Juggler Michael Moschen's comic antics with three white balls delighted the audiences both nights. He created a total change of mood, from humor to spectacle, with his awe-inspiring Fire-Torch Act, a feat that consisted of swinging flaming torches close to his body at high speeds.

Hal Le Roy's tap dancing was the "Vaudeville!" final act. Le Roy has been dancing for more than 55 years in musicals, summer stock, TV shows, movies, the Ziegfeld Follies and, of course, real vaudeville at New York's Palace Theater.

"Vaudeville!" was the third show produced by DPA staff. Plans for future performances in the American Musical Theater series include a concert version of the 1930 George Gershwin hit musical "Girl Crazy" and a presentation of "A Musical Revelation: How Broadway Did It," with Tony Award-winning musical director Donald Pippen.—Linda St. Thomas



Fifty Years of Calder at Hirshhorn

"Calder's Universe" opens at the Hirshhorn on March 15, demonstrating among other things that works by Alexander Calder are not necessarily enormous or made of steel. (See color lithograph, "Contour Plowing," 1976, above.)

The exhibition, a traveling version of the major retrospective mounted by New York's Whitney Museum in 1976, will include tapestries, toys and jewelry, paintings, drawings and gouaches, mobiles and stabiles large and small—altogether, some 125 examples spanning the 50-year career of the renowned American artist who died 3 years ago.

"The underlying sense of form in my

work," Calder once said, "has been the system of the Universe, or part thereof. For that is a rather large model to work from."

In conjunction with the exhibition, HMSG will present a series of free events in the auditorium. They include an informal reminiscence by the artist's sister, Margaret Calder Hayes (Friday, March 16, 8 p.m.); an introduction to his sculptural innovation by scholar Joan Marter (Tuesday, March 20, noon), and a trio of films about the artist, including the famous Calder's Circus (Thursday, March 22, at noon, and again Saturday, March 24, at 1 p.m.).

"Calder's Universe" continues at HMSG through May 13.

Laureates Salute the Scholarly Life

Eight distinguished investigators in the fields of science and mathematics, including four Nobel Laureates, will discuss research as a vocation during a Smithsonian colloquium marking the 100th anniversary of Albert Einstein's birth on March 14.

"The Joys of Research," a 2-day event coordinated by the Office of Symposia and Seminars and a special program committee, will be held in Carmichael Auditorium on Friday and Saturday, March 16 and 17. Participating will be Nobel Prize-winners Julius Axelrod (physiology and medicine, 1970), Linus Pauling (Peace, 1962; Chemistry, 1954), Howard M. Temin (physiology and medicine, 1975) and Rosalyn S. Yalow (physiology and medicine, 1977).

A Friday evening session, "The Act of Creation in Music," will be given as part of the colloquium at the National Academy of Sciences. A highlight of the evening will be the Washington premiere of "In Sweet Music, Serenade on a Setting of Shakespeare for Flute, Viola, Voice and Harp," by the Jubal Trio and Donald McInnes.

The author of the chamber work, the distinguished American composer William Schuman, president emeritus of New York's Lincoln Center and the Juilliard School of Music, will be on hand to discuss the creative process of musical composition and performance.

Secretary Ripley will offer welcoming remarks at the opening session to an invitational audience of high school and college students and professors, along with a selected group of the participants' colleagues in various research fields.

Also speaking at the 2-day colloquium will be: I.M. Singer (mathematics), Massachusetts Institute of Technology and University of California, Berkeley; George B. Field (astrophysics), Harvard-Smithsonian Center for Astrophysics; J. Tuzo Wilson (geophysics), Ontario Science Centre; Ernst Mayr (evolutionary biology), Harvard University.

Moderators will be: Anna J. Harrison, American Chemical Society and Mt. Holyoke College; Andre Hellegers, Joseph and Rose Kennedy Institute of Ethics, Georgetown University; James Ebert, Carnegie Institution of Washington, and William Carey, American Association for the Advancement of Science.

Renovation

You'll be able to see some of NCFA's 18th- and 19th-century European, Asian and American works that are rarely on public display when the Renwick's Grand Salon gets a new look this spring. The paintings that have hung there, on loan from the Corcoran, will be sold by that gallery and the proceeds used to purchase additional American works for its collection. The Grand Salon will be closed for renovation during March and reopen on April 6.

Cleaning Up the Nation's Attic

By Thomas Harney

The Museum of Natural History's old fifth floor attic, a crowded storeroom for more than two million fragile and highly valuable anthropological study specimens, is undergoing an inventory of unprecedented exhaustiveness preparatory to moving the contents to an urgently needed new home.

Up to two-thirds of the Museum's immense collections of 3.5 million ethnological and archeological objects are stored in the attic, stacked up as high as the building's rafters in some areas. Many of the objects have been there since the Museum was built early in this century. Because of too little money, too few staff and not enough time, inventories for many years have been restricted to segments of the collection that have a research or exhibit priority.

Now the material in the attic, along with large numbers of anthropological specimens housed in the halls and basement of the Museum, is tentatively scheduled to be shifted in 1982 to modern quarters at the Smithsonian's projected Silver Hill, Md., Museum Support Center.

Anticipating this transfer, teams are collecting data that will make it possible for the Museum to make precise recommendations about the type of storage facilities and the amount of space that will be needed for the anthropological specimens at the new Center. Conservation priorities are also being defined for the entire collection for the first time.

Conservation and collection management experts at the Museum believe the inventory will confirm that the collection's transfer to a new facility is coming none too soon. Although many of the objects are well preserved, temperature fluctuations, dust, grime and cramped conditions, they say, are causing the deterioration of thousands of objects in the collection.

This damage is occuring at a time when scholars are becoming increasingly interested in studying these collections, according to Dr. William Fitzhugh, chairman of the Museum's Anthropology Department.

"The value of anthropological collections from vanishing or vanished peoples is inestimable," Fitzhugh said. "They represent unique national and global treasures which will never again be available to shed light on human history and esthetics.

"After 150 years of systematic collecting, immediate attention must be given to improving storage and conservation, or we may as well have left these things in the field—or underground. We've got a fantastic program going, and it's just in time."

In the MNH attic, Fitzhugh noted, finely made American Indian and Eskimo masks, garments and textiles collected in the 19th century by U.S. overland Western exploring expeditions and the Smithsonian's Bureau of American Ethnology are drying out and cracking. Baskets that have been pressed into crowded drawers are warping and breaking. Pots arranged on open shelves are in danger of being chipped or knocked to the floor and broken by passing workers and equipment. Eskimo sleds, kayaks or other objects that are too large

down in collection growth. During the early months of the war, the Museum's most valuable anthropological objects (along with other select Smithsonian scientific and historical treasures) were boxed and sent to underground government storage sites. They were not returned to the Museum until late 1944.

The ethnology collection was culled again when the new Museum of History and Technology took shape during the 1950s. Large quantities of historic artifacts of non-Indian origin—including musical instruments, textiles, ceramics, glass and furnishings—were transferred to MHT's Department of Cultural History.

But the explosive expansion of scientific activity in the 1950s brought vast new increases in the collection—even though growth was carefully limited to specimens considered to be important scientific documents. By the mid-1950s, the pressing need for more storage space led curators to take over alcoves behind anthropology exhibit hall wall partitions. These makeshift storage areas are still in use.

By 1960 space was short again. This time the Department of Anthropology resorted to placing storage cases in hallways. Both sides of the halls outside the department offices are now lined with cases from floor to ceiling.

These cases have been nearly filled to capacity by the almost 35,000 specimens that have come in annually through the 1970s—the majority of this inflow generated by a series of scientifically excavated archeological field projects undertaken by the Museum.

"We're now at the end of the line on space," said Vincent Wilcox, Department of Anthropology collections manager.

To plan the move to Silver Hill in an orderly and efficient manner, the department must assess the scope and nature of the total collection—something never done before. Wilcox, who helped carry out an inventory of the immense anthropological collections at New York's Museum of the American Indian before coming to the Smithsonian, has turned to the computer to do the job quickly and efficiently.

"Using the computer is the only practical way," Wilcox said. "The collections are so large and growing, and our knowledge of conservation science increasing so rapidly, that the sheer load of clerical work in managing the collections cannot be handled efficiently with the old system."

Wilcox is working with the staff of the Anthropology Department's Processing and Conservation Laboratories and the Museum's Automatic Data Processing Office. The ADP group is headed by Ann Ruttle, assisted by Johanna Humphrey, Cyndi Molnar, Hazel Shipley and Mary McCutcheon. Nine members of the inventory staff, led by Wilcox, are examining collections: Alice Thomson, Joan Andrews, Joan Gardner, Bruce Craig, Jennifer Loynd, Jane Ann Conway, Ginger Deucher, Susan Crawford and Julia Wildman.

The inventory staffers examine individual artifacts and fill out forms for the computer that list the catalog number, the



Joan Andrew works on inventory of North American ethnological basketry with Collections Manager Vince Wilcox.

collection and what is not. Data from the department's card catalog—the traditional reference to the collections—is being fed into the computer so that it can be matched against the inventory information. This will clarify any confusion caused by misnumbered, miscataloged and missing specimens.

The data collected on the dimensions and storage needed is expected to be invaluable in accurately estimating the space and facilities needed at Silver Hill. If the computer documents thousands of pointed-bottom baskets that need to be stored on special mounts on shelves, plans can be made in advance to acquire the mounts and the shelves, and allowances made for the shelf footage required to avoid overcrowding.

When the specimens are moved to Silver Hill, the whole collection will be physically reorganized according to preplanned arrangements based on the cultural origin of the material, provenience and status. This is expected vastly to improve the manageability of the collection for research and conservation projects.

The Silver Hill Center will be the Smithsonian's first building specifically designed for the proper housing and care of collections. Much of its space will be given over to MNH needs. In addition to anthropological objects, portions of the Museum's entomology, botany, mineral science, paleobiology, vertebrate and invertebrate collections are scheduled to be transferred there, releasing space in the Mall Museum that can be used for the construction of new exhibits. Space will be provided at Silver Hill for collection research and study and for a major conservation center designed for treatment of the collections, research on conservation techniques and training of interns in scientific theory and practical conservation skills.

New Film Changes Field Trip Image

A truism: A person can take in only so much on a museum visit, and after looking at hundreds of objects, a student may suffer from "field trip syndrome."

In an effort to combat this condition, the Office of Elementary and Secondary Education has produced a film, "Museums: Where Fun is Learning." The film, narrated by Assistant Secretary for Public Service Julian Euell, shows how museum visits can be active and enjoyable learning experiences.

"Learning comes in many forms," Euell said, "but it is active learning that stays with you."

"We wanted to show teachers and museum education specialists that a museum trip is another way to learn, not just an excuse to get out of the classroom," Ann Bay, OESE project director for the film, added. "Teachers need to prepare their students for the trip by telling them what to look for and why. When the students return to class, the teachers should build upon the museum experience.

"In the film, we suggest ways to do this and demonstrate specific teaching techniques for the museum and the classroom."

Since the film will be distributed around the country, "Museums" follows a group of children visiting selected Smithsonian exhibits that would relate to collections in smaller museums.



Rows of Southwestern American Indian pottery, collected by the Smithsonian in the 19th century.

for standard storage cabinets or shelves are sitting in the open, exposed to corrosive dust and mechanical damage.

The attic has been crowded for a half century. One of the first efforts to cope with this problem came in the 1930s when a prolonged and careful qualitative examination of the collections was undertaken to cull out specimens accessioned many years earlier which had little or no value for scientific research.

World War II brought a temporary slow-

object's name, its dimensions and the type of storage facility needed (rack, drawer, peg, open shelf, etc.) Note is also made of the material from which the object is made and its condition. A judgment is then made about whether the conservation need is minimal or if priority treatment is necessary.

The survey began in October and is expected to be completed in early 1980.

One of the survey's important benefits will be to determine exactly what is in the

"Perhaps most critical of all," Wilcox said, "will be the data in the computer on specimen conservation needs. At the present time, most problems brought to the attention of our conservators are chance discoveries made in the course of exhibit or research work. But now there will be a way of identifying, locating and quantifying large numbers of decaying specimens. Then we can gather the resources necessary for a systematic collection-wide attack on the problem."

A New Look at Tiny Creatures

By Linda St. Thomas

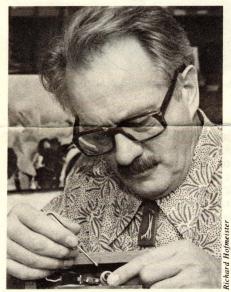
His assignment sounds straightforward enough: film sipunculan worms as the larvae undergo metamorphosis. What makes the filming so tricky is that the larvae live in coral reefs 20 miles off the Gulf shores of Florida, they are only a couple of millimeters in size and they metamorphose while burrowed in the mud.

None of these details will prevent photographer Kjell Sandved at the Museum of Natural History from trying to film these little creatures. He simply invented a movable stage for their tiny aquarium and a few new parts for his camera.

"I've taken many time-lapse pictures so scientists can follow the development of an organism." Sandved said, "but these worms are so tiny that it's really a challenge for me. The project could take as long as a month because every step is so precise and because there might be days when the weather prevents us from taking the boat out."

Sandved will be working closely with Dr. Mary Rice, curator in the Invertebrate Zoology Department. She has been laboring on this sipunculan project for nearly 10 years and has already tried doing her own filming. "I usually take my own pictures but this one was too much for me, so I called Sandved in. I figure if it can be done at all, he's the one to do it."

Sandved went to Rice's laboratory in the Smithsonian's Fort Pierce Bureau in Florida to see what would be needed for the filming. The organisms will be placed in a 6-inch-square aquarium (made by Sandved, of course), half filled with salt water and half with chambers of mud or cryolite, a plastic so finely powdered that a photog-



Sandved with his movable stage

rapher can see the organism embedded within and keep it in focus.

"I realized that the aquarium has to be moved so I can catch different angles. Moving it by hand was too fast and too inaccurate. Besides, I need to concentrate on my focusing," Sandved said. So he devised a tiny movable stage for the aquarium, using two miniature motors (each is about an inch long) which have a 5,000 to 1 gear reduction. He'll hook that up to a "joy stick"—the kind used by amateur model

Classes by the Bay

The Chesapeake Bay Center for Environmental Studies will celebrate its spring season of classes and lectures with an open house at its 2,600-acre natural laboratory in Edgewater, Md., on Saturday, April 28, from 2-4 p.m.

Aspiring ecologists of all ages are invited to meet the CBCES staff, attend minilectures and take active part in learning from upland and estuarine ecologists.

Seven events are planned at CBCES for adults, families and children this spring: on four Tuesday evenings in April, a series of lectures on Chesapeake Bay history and ecology; in May, two weekends, one of which will include an overnight stay on Poplar Island, of in-depth exploration of natural resources for family groups, and three programs for pre-schoolers with parents, 7th and 8th graders, and children of all ages. A spring workshop series for docents will begin at the Center on March 10.

For more information about the programs, telephone CBCES at 261-4190 (from Washington), 269-1412 (from Baltimore) and 798-4424 (from Annapolis).

airplane flyers—to move the stage, millimeter by millimeter, in different directions. His hands will be occupied moving the stick and focusing his camera, so Sandved will use a foot pedal to start and stop the camera.

Lights present another problem. Sandved needs electronic flashes and strobe lights for his time-lapse filming which will go on day and night. But lights are hot and he can't afford to change the temperature of the water by even one degree because that might inhibit the worms' behavior. He will used a special heat filter which he invented several years ago for just such situations. With his filters and reflectors, he'll be able to use strobes every 15 seconds in addition to any other lights necessary for filming.

"After all this preparation, I'll just have to wait for the sipunculan to do their thing," Sandved said. To help the little larvae metamorphose, Rice will add water that has had the adults in it, and that somehow stimulates the metamorphosis of the larvae.

The completed film should provide Rice with a basis for her analysis of the behavior of sipuncular as they develop.

Although technically Sandved's work is finished when he turns over the film to the scientists, he's sure he will keep in touch to see how the research is coming along. After all, he says, you can't spend a month studying these creatures and not find out what the scientists eventually discover.

Sandved argues that he's forced to be both inventor and photographer because photography shops just don't carry the special items he needs. For example, while filming birds in flight a few years ago, he had to follow a particular bird before narrowing his field of vision by looking into the camera lens. So he installed a gun sight at the end of his lens. He said it works beautifully.

Sandved has been taking pictures for MNH curators for the past 19 years. He is probably best known to scientists for his movies of animal behavior and underwater reef animals and to the public for his close-ups of flowers, butterflies and insects in their natural habitats. His photos have appeared in many publications, including four of his own books: "Butterflies," "Shells," "Butterfly Magic" and "Insects."

A collection of his butterfly and moth photographs is now exhibited in the Kodak Photo Gallery in New York City. The gallery wrote to him last year requesting 10 photographs, but he sent hundreds so they would have their choice. It was too hard to make a selection, so Kodak is showing 75 Sandved photos, some as big as 40 by 60 inches. The gallery is located at 1133 Avenue of the Americas and is open to the public, free of charge.

In mid-May, Sandved will be on his way to Jordan with anthropologist Donald Ortner on another project—photographing the remains of the Bronze Age men in the tombs of Bab edh-Dhra near the Dead Sea.

New Film at NASM

"Living Planet," the National Air and Space Museum's second feature film, produced at a cost of \$1½ million and a year of time, will open in the NASM theater in early April.

The new film will be shown on the huge IMAX screen—five stories high and seven stories wide—which impressed the nearly 4 million visitors who flocked to NASM's first movie, "To Fly."

"Living Planet" was produced exclusively for the Museum by Academy Award-winner Francis Thompson, who also made "To Fly." The new film carries its viewers all over the globe—to Africa, India, Venezuela and the North Pole. Through the magic of air and space flight, the audience gets a fresh perspective on the planet Earth.

The movie was directed by Dennis Moore and presented as a public service by the Johnson Wax Company.

After showing "Living Planet" exclusively for at least 2 months, NASM is expected to schedule one or two showings per day of the still-popular feature, "To Fly."

Admission will continue to be 50 cents for adults and 25 cents for children, students and senior citizens. Fees are used for the operation and maintenance of the theater.



"Dalle Mura di Roma I" (1977) by Irwin Kremen

Professor's Collages at NCFA

By Margery Byers

A Duke University psychology professor named Irwin Kremen is also a self-taught artist and, until recently, a very private one. Although his collages hung at home, only a few curious friends knew they were his. He never planned to show his work and, when he agreed to the current exhibition at the National Collection of Fine Arts, other friends asked when they could see his collages.

Kremen, who studied at iconoclastic Black Mountain College in North Carolina, was inspired to begin work in collages when he visited Europe in 1966 and renewed an acquaintanceship with collagist Italo Valenti. "When I looked at his paper collages," Kremen recalled, "something absolutely vital got through to me."

Kremen, who now works with scraps of paper, acrylic and many other materials, making his own collages, sees no conflict between his dual careers. "There is a continuity throughout my life," he says, "and the Kremen of Black Mountain and the Kremen of today are, in a sense, one. I'm an intellectual as well as an artist and the life of ideas is very important to me. In my teaching, the content of my courses includes philosophy and the history of science as well as psychology."

For the past dozen years, most of the paper Kremen uses in his work has come from posters on European walls, windows and kiosks. Occasionally, he uses similar papers from New York, Cambridge and Washington. Passersby have seen him prying loose a prized piece of paper with his Army knife. Europeans frequently ask what he is doing and, told that he is an artist, simply nod their heads knowingly.

The largest collage in this exhibition is 12 by 9 inches; some are a fourth that size. Kremen uses tweezers to position his small pieces and secures the design with plexiglass as he contemplates changes.

To finish a collage, he does not glue the pieces to one another but, instead, hinges them with small bits of fine Japanese paper. Where a very thin applicator is needed to keep the glue from spreading, he uses microelectrodes adapted from the neurological laboratory at Duke. "Using the microelectrode in conjunction with a binocu-

lar magnifier worn on the head, I can set a minute fleck of paper wherever I wish on the surface of a collage." Affixing a collage is painstaking and one false move could hurt a work.

"It's a very exquisite experience when a collage is fixed, and that usually comes when I'm alone."

Although Kremen deliberately has sought isolation for the past dozen years, he now is accepting the exposure of his work in this exhibition. "Going public is altogether new to me and I'm feeling my way. I want to be true to myself and to my work—to do what's right for the collages with dignity, elegance and responsibility."

The exhibition remains on view through March 25.

Summer Hours

Six Smithsonian museums on the Mall will be open to the public daily from 10 a.m. to 9 p.m. beginning Sunday, April 1, and extending through the Labor Day weekend.

The museums which will extend their closing hours to 9 p.m. to accommodate the visiting public during the spring and summer seasons are: the Air and Space Museum, the Hirshhorn Museum and Sculpture Garden, the Museum of Natural History, the Museum of History and Technology, the Castle and the Arts and Industries Building.

Four other Smithsonian museums will continue to operate from 10 a.m. to 5:30 p.m. daily: the National Collection of Fine Arts, the National Portrait Gallery, the Renwick Gallery and the Freer Gallery of Art.

The Anacostia Neighborhood Museum will be open from 10 a.m. to 6 p.m. weekdays and from 1 p.m. to 6 p.m. weekends and holidays.

Beginning April 1 and continuing through Sept. 30, the National Zoo grounds will be open from 6 a.m. to 8 p.m. The buildings will be open daily from 9 a.m. to 6:30 p.m.

Smithsonian Exhibit To Celebrate Einstein's Centenary

Papers filled with mathematical formulas and a short poem written on White House stationery, letters to presidents and photos showing the great man playing his violin and sailing his boat—these and other items in "Einstein. A Centenary Exhibition" offer evidence that the man who formulated the theory of relativity was a man for all seasons.

The exhibit, opening March 3 in the Museum of History and Technology, covers Einstein's scientific theories, the impact of his work, the way he worked and his influence in human affairs, as well as his personal history and interpretation of the great man through the eyes of various artists.

Einstein was so well known during his lifetime that he could almost be called a living legend. "He enjoyed an unparalleled fame," Curator Paul Hanle said. "Certainly no scientist before or since has held such a position in society."

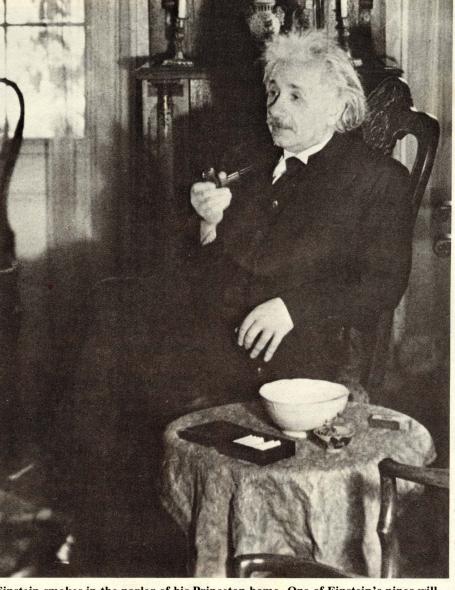
His popularity presented the curators with unusual problems. Because he was so well known, his memorabilia, everything from blackboards to correspondence, was saved.

"We were confronted not only with a wealth of memorabilia but also with all the anecdotes, many of which were of dubious truth, even when first told," Hanle said. He explained that so much has been said and written about Einstein that even some "facts" are myths. "In our small exhibit we tried to pick objects which would give a comprehensive view of Einstein and introduce our viewers to his personality and his work."

According to one of the more folksy tales, Einstein was a shy, retiring, politically naive man. One glance at the exhibit section called "Lending His Name and Fame" should dispose of that. Einstein was well aware of his fame and the obligation that fame placed on him.

Thus, in the summer of 1932, the Institute of Intellectual Cooperation asked Einstein, a former member, to draw a person of his choosing into correspondence on any problem of importance to the League of Nations and the intellectual life of humanity. Einstein promptly wrote to Sigmund Freud posing "the most insistent of all problems civilization has to face: Is there any way of delivering mankind from the menace of war?" Freud, then 76, responded with a 14-page letter, written in an elegant 18th-century German hand.

Einstein also endorsed the political cause of President Franklin D. Roosevelt and



Einstein smokes in the parlor of his Princeton home. One of Einstein's pipes will be on display in the exhibit at MHT.

congratulated him on winning a third term.

"The exhibit includes correspondence between Einstein, FDR and Eleanor Roosevelt, an invitation to the White House and even a poem Einstein composed during a visit at the White House," Hanle said. "The friendship between the two men appears to have been stronger than some of Einstein's biographers knew."

Einstein's two-stanza verse expressing his admiration for FDR was written in January 1934 in a short note addressed to the Queen of Belgium. Einstein's wife, Elsa, copied the poem and sent it to FDR who added the covering note, "This poem was written in the White House." The verse and the notation are displayed.

The blackboard used by Einstein during the second of three Rhodes lectures at Oxford University in 1931 is also displayed. The chalk equations, in his own hand, saved through the decades by only a glass cover, relate to the necessity of the "cosmological constant," a major scientific issue in Einstein's career. The board was loaned to the exhibit by the Museum of

History and Science in Oxford, England.

On display are Einstein's most important publications on the special and general theories of relativity which set forth laws governing the universe, from the motion of stars and galaxies to the properties of subatomic particles, his theories of gravitation and his contributions to quantum theory.

A handwritten 1929 manuscript (in ink, with crossouts) and resulting journal publication of one of Einstein's efforts to formulate a unified field theory is shown in the exhibit. Einstein worked on the unified field theory—an attempt to bring together, in one mathematical structure, the laws of electromagnetism and gravitation—from 1923 until his death in 1955. Several of his works in this area were counted significant, but the theory remained incomplete throughout his lifetime, as it is today.

Einstein was a favorite subject of painters, photographers and sculptors. The centenary exhibit includes busts by Jo Davidson and Gina Plunguian, paintings by Joseph Oppenheimer and Siegfried F. E. Elfinger, drawings by Ben Shahn and Joseph Scharl and a photograph by Fabian Bachrach.

When artist Gina Plunguian sculpted Einstein in his garden, she asked him to fill out a personality questionnaire designed to correlate body build and temperament. The questionnaire is shown in the exhibit along with the well-chewed pipe used by Einstein during the sittings. He had taken to chewing on the end of his pipe years earlier when he had been ordered by doctors drastically to reduce his smoking.

No exhibition about Einstein would be complete without a section devoted to the scientific experiments used to test Einstein's General Theory of Relativity and Gravitation. Included in this exhibit is a gravity wave detector (used to test the proposition that gravity acts equally on all substances), a retro-reflector like the one planted on the moon by Apollo XI crew members to enable the moon's distance to be measured with lasers and an atomic hydrogen maser used to demonstrate that clocks run slower in gravitational fields.

Some of the pieces of apparatus, such as this gravity wave detector, were not invented until years after Einstein's death. When he postulated his theories in the early 1900s, there were no instruments sophisticated or sensitive enough to test his theories.

"Einstein. A Centenary Exhibition" continues through March 1980 on the first floor of MHT near the Dibner Library. It was organized by Paul Forman, curator of modern physics at MHT, and by Hanle, who is curator of science and technology at the National Air and Space Museum, and designed by Nadya Makovenyi.

Linda St. Thomas



CAREFUL TRAINING... A student sea lion is rewarded for hard work by Trainer Lisa Stevens in a program which is teaching the new occupants of NZP's Beaver Valley to cooperate in their own care. The sea lions are learning to present themselves for medications and to retrieve, rather than swallow, small objects such as pebbles. They will be living—and behaving properly, thanks to their training program—in the Beaver Valley seal and sea lion pools. The valley is scheduled to open May 4, but the pools are filled and in operation now.

Geological Survey Marks 100th Anniversary

By Ellis Yochelson

Ever since the U.S. Geological Survey was founded 100 years ago this month to map the United States Western territories, Survey paleontologists have taken an active role in overseeing and studying the Smithsonian's fossil collections.

Today, the Survey maintains 50 paleontologists and support staff in the Museum of Natural History, which remains the headquarters of its Paleontology and Stratigraphy Branch, although regional centers in Denver and Menlo Park, Colo., and the National Center at Reston, Va., now house more paleontologists outside the Museum.

The first fossil specimens came to the Smithsonian as a result of geological exploration in the Western territories, and some of the Institution's first paleontologists were men associated with those exploration teams.

As the Survey expanded from its original quarters in the Castle and the Arts and Industries Building, various offices moved out of the Smithsonian, until only the paleontologists were left. Charles D. Walcott, an early paleontologist, left the Smithsonian in 1892 to become chief geologist and subsequently third director of the Geological Survey. He returned to the Smithsonian part time in 1897 to serve as acting assistant secretary, and full time in 1907 as fourth secretary.

Paleontologists flourished at the Smithsonian, building what is surely the world's largest fossil collection and serving the Institution as honorary curators. Paleontologist William H. Dall, for example, was the only curator of recent mollusks for nearly half a century.

As soon as flooring for the new MNH building was nailed down in 1911, cases of fossils were moved from their cramped

quarters in the A&I Building to the west side of the new building. John B. Reeside became chief, serving until 1949.

A new chief, Preston E. Cloud, took over in 1950 to rebuild and increase the postwar staff. Stone Hall on the second floor, now the Hall of Physical Geology, was transformed to office space. For a decade it served as inadequate quarters that were noisy and miserably hot in the summer. Another post World War II development was the addition of a coral room,

Correction: Torch regrets the incorrect spelling of the name of MNH Bird Division employee, John Barber, in the February issue.

containing cores drilled on Bikini Atoll. The Hope Diamond now marks this site.

The move into the east wing in 1962 was a major step forward. It is worth noting that not a single drawer of fossils was dropped by the Museum moving crews. A few Survey people had been housed in an old WAVE barracks where the Forrestal Building now stands, but the extra space permitted them to return to the Museum, with sufficient space once the west wing was completed in 1965.

The USGS paleontologists continue to collect and study fossils. Many of the specimens are added as research in other locations is complete.

Ellis Yochelson, a paleontologist, has been a member of the U.S. Geological Survey for 26 years, all of which have been spent at MNH.

Museum Honors Meteorite Expert

The Museum of Natural History Department of Mineral Sciences recently held a party to honor meteorite authority Dr. Edward P. Henderson. The occasion marked his 80th birthday and his 50th anniversary at the Smithsonian.

The Smithsonian is one of the world's great centers for meteorite studies but it was not always so, Henderson recalled. When he joined the staff in 1929, no one had given much attention to the meteorite collection. "It only numbered about 1,000 specimens and some of the people here didn't think that a collection as small as that could have much scientific importance."

Long before the Space Age dawned in the 1950s, this skepticism had vanished.

Henderson still comes to MNH regularly to pursue his research, but he is no longer the Smithsonian's only meteorite man. Four other experts in the field—Brian H. Mason, Kurt Fredriksson, Roy S. Clarke Jr. and Robert F. Fudali—act as curators and study the collection.

Dr. Harry S. Ladd, one of Henderson's U.S. Geological Survey colleagues at the Museum, celebrated his 77th birthday on Jan. 1. Ladd, an authority on geology and fossils of the Pacific islands, has been at the Museum since 1950. He is an associate in the Department of Paleobiology and is continuing to describe fossils and write papers. A paper he edited on the geology of Bikini and nearby atolls is the largest work ever published by the U.S. Geological Survey.

SI in the Media

Television viewers across the People's Republic of China are now familiar with at least four Smithsonian museums, thanks to 8 minutes of films transmitted from WRC-TV studios here and shown on national TV during the recent visit of Vice Premier Teng Hsio-ping and Madame Cho Lin. Both dignitaries were shown touring NASM, and Madam Cho Lin was filmed at MHT and the Freer and with Mrs. Carter and Amy at the Zoo. The visits were also covered extensively in the United States by television, radio and print media.

Art

Richard Estes' "Urban Landscapes" at the Hirshhorn were the subject of an article, lavishly illustrated in color, in the Washington Post Sunday Magazine. JoAnn Lewis wrote: "His paintings reward our attention, offering a kind of instant urban renewal." Paul Richard praised Estes in another Post review, describing the show as "extraordinary."

Time magazine's Robert Hughes, in a review of Ben Nicholson's full-scale retrospective of HMSG, expressed the view that 'the show has long been needed to set in view the osmotic Nicholson exchange between the worlds of natural and abstract form.'

The Baltimore Sun felt that the Freer's exhibition of drawings from Iran and India was unified by the drawings' humanism and their intimate and detailed portrayals of people—both real and imagined.

Washington Star critic Benjamin Forgey described the Kremen collage show at NCFA as "amazing . . intensely intellectual" and "technically innovative."

Comings and Goings

Siadhal Sweeney has been appointed editor of the quarterly Journal of the Archives of American Art. Sweeney, a free-lance editor and writer, is a graduate of Phillips Exeter Academy and Columbia College. A member of New York's literary club, the Grolier, he has been an editor at Prentice-Hall and Harcourt Brace Jovanovich.

Victor Govier has joined the Anacostia Exhibits Center as exhibits program manager. European born and educated, Govier has worked as production manager with Design and Production, Inc., in Alexandria, Va., and for 8 years operated his own design and fabrication company. In addition, he was with the design firm of Wickham and Associates as an account executive and general manager of the exhibit company, Expo, Inc. Govier was most recently an audio-visual specialist and marketing coordinator for the National Audio Visual Center of the National Archives.

Gary Kulik has been named assistant curator in MHT's Division of Textiles. Kulick, a Ph.D. candidate at Brown University, will be in charge of MHT's collections of textile machinery, patent models and implements. Kulik, who worked for 3 years as curator of the Slater Mill Historic Site in Pawtucket, R.I., specializes in labor history and the history of technology. His book, "Rhode Island, An Inventory of Historic Engineering and Industrial Sites," has just been published by the Historic American Engineering Record.

Floyd Robinson, an SI fire protection inspector since 1974, has retired from that position. Robinson came to the Smithsonian after his retirement from the D.C. Fire Department.

Stephen Criswell and Russell Warner have joined the staff at the Mt. Hopkins Observatory as acting managers of facilities and of the Satellite Tracking Station, respectively.

Criswell was a member of the satellite tracking program at SAO in 1962 and has worked at field stations in Florida, Spain and Greece, as well as at network head-quarters in Cambridge. From 1967 to 1973, Criswell served as program manager for the Very Long Baseline Interferometry project of the observatory's Radio Astronomy Division. Since 1973, he has been manager of the Satellite Tracking Station at Mt. Hopkins.

Warner, who succeeds Criswell in that post, joined the Smithsonian's tracking program in 1970 and served at stations in Brazil and South Africa. He has been assigned to the Arizona facility since 1976.



Madame Cho makes a new friend in MHT.

Forgey put Kremen on a level with American masters of collage: Robert Motherwell, Anne Ryan and Romare Bearden.

The Baltimore News-American called "Know What You See," a SITES show, "a tribute to the conservator and the role he plays in identifying and preserving the genuine in art."

Detailed articles on the Museum of African Art by Sarah Booth Conroy recently appeared in the Washington Post and Horizon magazine. Both illustrated pieces focused on the founder-director, Warren Robbins, and the Museum's holdings.

Ornament

An Interiors magazine review of the Cooper-Hewitt exhibitions, "Ornament in the 20th Century" and "Vienna Moderne," decided that both consist of objects

Old Acquaintance at First Sight

The stagecoach at the Smithsonian's Museum of History and Technology fascinated her because she and her husband enjoy the western movies newly available in China. The general store transplanted from the hills of West Virginia prompted her to ask if it had been a co-op. But it was the reconstructed kitchen of an Italian immigrant of the 1920s that elicited her greatest admiration. Although it was supposed to show the poverty and hardship suffered by America's immigrants, Cho Lin, the warm and plump wife of Teng Hsiao-p'ing, saw it quite differently. "They certainly had high living standards," she marveled.

Time magazine Feb. 12, 1979

that have been out of sight long enough to be appreciated again. Curator Richard Oliver got credit for making the ornament show more than just a presentation of objects.

Architecture critics from Washington and New York loved Cooper-Hewitt's current exhibition, "The Dream King—Ludwig II of Bavaria." Wolf Von Eckardt of the Washington Post compared the show with "The Treasures of Tutankahman" and "The Splendors of Dresden" in its breathtaking magnificence. Ada Louise Huxtable of the New York Times admired the show's "exquisitely skilled renderings of every phase of Ludwig's design fantasies."

The February issue of Life magazine devoted a full-page color photo to the 21,327-carat topaz, "The Brazilian Princess," which is on loan to MNH. The 9½-pound topaz is the world's largest gem.

Betty James of the Washington Star wrote about two other glittering specimens—131.43-carat diamond necklace and another necklace, set with 36 sapphires, which were recently given to MNH by sisters Lita Annenberg Hazen and Evelyn Annenberg Hall. A third sister, Janet Annenberg Hooker, gave an emerald brooch to the Museum in 1977.

Performance and Celebration

DPA recordings continue to get raves from music critics. Most recently, the Cleveland Plain Dealer reviewed DPA's Broadway series, though the newspaper doesn't usually cover records that are not available locally. The series was important enough to warrant an exception, the article said.

Writers at both the Post and the Star were inspired by DPA's "Vaudeville!" to put together features on this uniquely American form of entertainment.

The Washington Post's Henry Mitchell wrote extensively of two films on Margaret Mead which the Office of Symposia and Seminars screened during its 10th anniversary celebration. The Post also mentioned an event the office held to launch Washington's observance of the International Year of the Child.

Science

The Center for Astrophysics laser satellite tracking system will be featured in the New York Times' new television commercial for its regular Tuesday section, "Science News." Viewers will have to look fast, though—the picture is on the screen for a quarter-second.

The Multiple Mirror Telescope was featured in a 90-second film broadcast during halftime in the Arizona-Southern California basketball game on Jan. 22. The Pacific-10 Conference game was shown on most NBC-TV affiliates in the West and on cable stations in Texas, North Carolina, Michigan, Illinois, Virginia and Oklahoma.

Books

"Fifty American Faces," NPG Research Historian Margaret Christman's book published by SI Press to mark the Portrait Gallery's 10th anniversary, was described in a Time magazine review as "an eclectic choice of portraits, accompanied by masterly biographies in miniature."

Calendar

The Smithsonian Calendar for April will appear in the Washington Star on Sunday, March 25, and in the Washington Post on Friday, March 30.

People

It's been quite a month for articles written by or featuring SI personnel. A partial listing . . . Joan Madden, MNH, in Curator magazine . . . Edith Mayo, MHT, in Ms. . . . Martha Morris, MHT, in Museum News . . . Washington Post articles on Oliver Anderson, NCFA, and William Adair, NPG . . . San Diego Union on Kjell Sandved, MNH . . . American Preservation magazine on Gordon Dentry, SI restoration specialist, and the Baltimore Sun on Linda Chick, CBCES.—Johnnie Douthis

SMITHSONIAN TORCH March 1979

Published for Smithsonian Institution

personnel by the Office of Public Affairs: Alvin Rosenfeld, Acting Director; Susan Bliss, Editor; Kathryn Lindeman, Assistant.

'February'

(From Page 1)

main on duty until replacements arrived. But by Monday morning, public transportation had been discontinued and many city and suburban streets were unplowed, making it impossible for many members of the guard force to get to work. Staff Duty Coordinator Aaron Patton remained at work in the Protection Division for 42 hours, coordinating security activities in the various museums.

The guards who stayed on duty were virtually marooned in the museums, with cafeterias closed and no food deliveries in sight. All their meals came from the coin-operated machines, but a few brave, and hungry, souls walked to a fast food restaurant to get takeout orders for those still on duty.

After the blizzard, the farmers, who had by then become a routine part of Mall life, took time out from their political activities to help Washingtonians stranded by the snow, transport doctors to and from hospitals and plow out hundreds of cars. The farmers who settled in on the Mall Monday, Feb. 5, frequently visited the museums, especially the National Air and Space Museum, and ate lunches in the cafeterias.

In fact, what with the barricade of buses and police cars, cross streets closed and the NASM public garage shut down, some-



Barricade on the Hirshhorn plaza

times it seemed the only visitors in the museums were the visor-capped farmers.

Early reports from the National Park Service said tractor damage to the Mall may cost about \$1.1 million to repair. The only damage to Smithsonian property, as of this writing, occured at the Freer on Feb. 7 when a tractor drove up toward the entrance, breaking the third step from the bottom.

The storm was responsible for some damage to the Arts and Industries roof which has been under construction for more than a year. The weight of snow and rain caused several ice chunks to fall through from the outer roof to the lower skylight roof. One office, the South Hall and a section of the west wing corridor were closed on the Wednesday after the storm but were scheduled to reopen the next day. No one

The visits of the Chinese officials created much less fuss in the museums, although they received almost as much press coverage. On Tuesday, Jan. 30, Madame Cho Lin and other women of the Chinese delegation toured the Freer Gallery with Secretary Ripley and Freer Director Thomas Lawton. They were, of course, accompanied by an interpreter, but Madame Cho and Lawton chatted away in Mandarin.

Madame Cho Lin then went on to MHT where she spent more than an hour taking a good look at Americana. Her last stop there was the post office, where she was greeted by postal clerk Franklin White, who gave her stamped cards he had signed as souvenirs and asked her to sign several for him.

The following day, Vice Premier Teng visited NASM where Ripley, Acting Director Melvin Zisfein, Under Secretary Michael Collins and Assistant Secretary David Challinor showed Teng and his entourage through the milestones gallery, the General Aviation Gallery and Space Hall with a 10-minute stop in the theater to see portions of "To Fly."

Later Madame Cho joined Rosalynn and Amy Carter for a trip to the Zoo. They stood near the fence watching Hsing-Hsing, the male panda, devour a few bamboo stalks, as if on cue, for the photographers and camera crews. Resident Associate Program Director Janet Solinger won a 19-day trip to China in a fundraising drawing sponsored by Planned Parenthood of Greater Metropolitan Washington. Said Solinger, who was out of town when they phoned about the prize: "It's the first time I've ever won anything."

Secretary Ripley has been named a commander of the Order of Merit by the Polish government in honor of his contributions to wider recognition of Polish culture in the United States. Cited in the award were the celebration of the 500th anniversary of the birth of Polish astronomer Copernicus, which was part of the Smithsonian's 1973 symposium, "The Nature of Scientific Discovery"; exhibitions of Polish art distributed by SITES, and the Smithsonian's work on the foreign currency program.

Richard Hallion, curator of science and technology at NASM, presented a paper on origins of lifting re-entry technology and the space shuttle at the annual meeting of the American Association for the Advancement of Science in Houston. Hallion also gave lectures before the Experimental Aircraft Association, the Society of Experimental Test Pilots and the Antelope Valley chapter of the American Institute of Aeronautics and Astronautics.

Jay Chambers, chief of the SI Protection Division, conducted a workshop on security systems during an international sym-

Newsmakers

By Johnnie Douthis

posium on fine art security held at the University of Delaware.

Lloyd Herman, director of the Renwick Gallery, gave the opening address, "History of American Crafts Since 1900," at the Statewide Connecticut Crafts Confer-

James Mahoney, chief of the Office of Exhibits Central, and Andrea Stevens, SITES' American studies coordinator, were on hand for the opening of a new SITES show, "Played with Immense Success," at the Louisiana State Museum. The exhibit is a joint effort produced by SITES and OEC.

Louise Hull, staff assistant in NASM's public information office, participated in the Seventh Annual U.S.-Soviet Young People's Conference held in Tbilisi, Soviet Georgia

Marlene Palmer, NCFA museum technician in the Department of Visual Resources, was elected 1979 co-chair of the District of Columbia-Maryland-Virginia Chapter of the Art Libraries Society of North America.

Paul Hanle, NASM curator of science and technology, has been awarded first prize in the 1979 National Space Club Goddard Essay Competition. Hanle's paper, "Background to Rocketry," treated the intial stages of the development of aerodynamic theory in Germany.

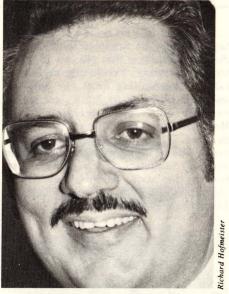
Breton Morse, exhibits specialist at NCFA, has written and published a catalog that accompanies an exhibition of his works. Entitled "Breton Morse," the publication covers approximately 15 years of the artist's paintings, showing some photographed examples.

Michael Fruitman and Linda DuBro, editors in the Office of Exhibits Central, co-authored an article on exhibit labeling which ran in the January/February issue of Museum News.

A portrait of **Fred Whipple**, former director of SAO, was unveiled at a special ceremony held in January at the Harvard-Smithsonian Center for Astrophysics. The portrait, by Gardner Cox, hangs in the Perkin Lobby at the Center along with portraits of past directors of the Harvard College Observatory.

Tung Lin Wu, research chemist at CBCES, presented a paper on "Atrazine Enrichment in the Microsurface of the Rhode River" at the 145th national meeting of the American Association for the Advancement of Science in Houston, Texas.

Mario E. Ferris, an engineering technician in the Office of Facilities Planning and Engineering Services, has been commended by Assistant Secretary for Administration



Mario E. Ferris

John Jameson for using cardiopulmonary resuscitation to save the life of a person stricken at L'Enfant Plaza. Ferris learned to revive heart attack victims in a Smithsonian training program.

MNH botany Curator James N. Norris and his wife, Katina Bucher, an MNH research associate, presented a lecture on their underwater studies of marine algae at a recent meeting of the Congressional Underwater Explorers Club. The lecture included a report on research done on the Belize Barrier Reef, off British Honduras.

The publicity program for the 1978 Festival of American Folklife won second place in the Public Relations Society of America's annual Thoth Award competition. **Linda St. Thomas** of the Office of Public Affairs, who served as public information officer for the Festival, accepted the Thoth Award at ceremonies held Feb. 16 at the Kenwood Country Club in Bethesda.

James F. Lynch, CBCES zoologist, has returned from 4 weeks in Mexico, Guatemala and Honduras investigating the distribution and ecology of tropical amphibians and reptiles.

Sharon Maves, former CBCES work/learn student, represented the Smithsonian at Calvert County's Teacher In-Service Training program. Maves presented information on a CBCES oil spill project and talked about education activities at the Institution.

George Field, director of the Harvard-Smithsonian Center for Astrophysics; Riccardo Giacconi, associate director for High Energy Astrophysics, and William Press, CFA staff member and professor of astronomy at Harvard, participated in a freewheeling roundtable discussion of "The Evolving Universe." The program was done for a special edition of "Science and Scene," a nationally syndicated radio program which is carried on more than 100 public and commercial outlets around the United States.

A special three-part series on "The New Astronomy" written by Robert Cowen, natural science editor of the Christian Science Monitor, featured interviews with Field, Giacconi and Press along with Herbert Gursky and Steven Weinberg, also of CFA, and Noel Hinners of NASA.

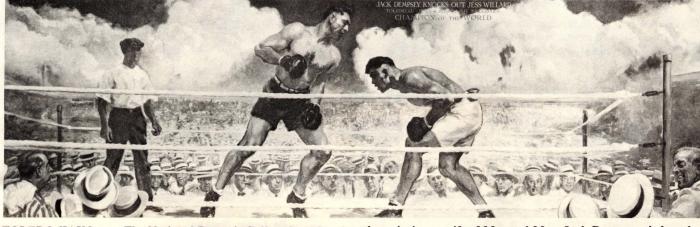
Linda Chick, special events coordinator, and Suzanne Pogell, public information officer at CBCES, talked about the Center's Winter Bird SEED (Smithsonian Environmental Education Day) Sale on WNAV Annapolis' "Second Cup of Coffee."

CBCES Director **J. Kevin Sullivan** led a panel discussion on the resolution of conflicts among Bay users at the annual meeting of the Citizens Program for Chesapeake Bay, held in Fredericksburg, Va. Sullivan is a CPCB Executive Committee member.

John Falk, CBCES associate director for education, traveled to the Amazon Basin in Brazil to collect photographic data for use in studies on environmental preference.

NASM Exhibits Designer John Clendening has a one-man show of recent paintings at the Rockville Municipal Art Gallery through March 4.

Margaret Hird, special assistant to the secretary for congressional liaison, designed an all-day symposium and led a workshop for the Washington Wellesley Club on career opportunities outside the federal sector. She also participated in a program, "Models and Mentors," at the CIA's National Photographic Interpretation Center. This was a repeat of a format she originated and initially gave at NPIC last



TOLEDO KAYO... The National Portrait Gallery has placed on view this famous representation of the Dempsey-Willard match in Toledo on July 4, 1919, when favorite Jess Willard, "the White Hope," was defeated by William Harrison "Jack" Dempsey.

James Montgomery Flagg (1877-1960)was commissioned to execute the painting in 1944 to hang in Dempsey's restaurant at 1619 Broadway. Although completed 25 years after the fact,

the painting, a gift of Mr. and Mrs. Jack Dempsey, is based on a series of ringside photographs.

Flagg Included a number of portraits of celebrities at ringside. Identifiable among them are fighter Max Baer, front right corner; cartoonist Rube Goldberg, back right corner facing ring; Governor James Cox of Ohio, second from Goldberg's right, and satirist Damon Runyon, to the right of Dempsey's knee.

Sports

By Susan Foster

Bowling: The SI bowling teams continue to play musical chairs in the top five spots, with the Thunder Strokers holding on to a half-game lead.

The Juicy Five are in second, followed by the D.C. Chokers and the library team, No Names, sharing third place. Ray Scoggins, OPlantS, leads the Men's High Set with a 656. Gerald West is in second place in the Men's High Average category with a 167 average.

Inez Buchanan, libraries, continues to lead the women bowlers in three separate categories—High Average, 150; High Series, 533, and High Set, 605.

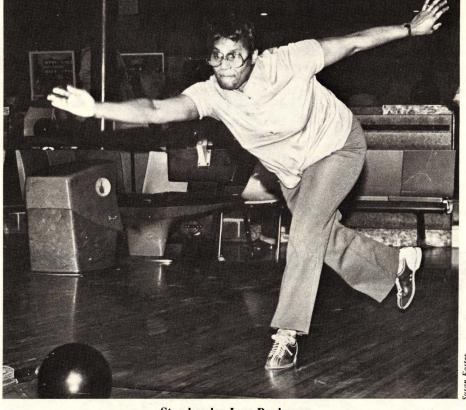
Jogging: The SI joggers have been idle as a team, but individually there is at least one who's keeping pace. He is Mike Bradley, SSIE, who, in last December's Interagency Tidal Basin competition, set a new course record of 9:14, shaving 6 seconds off the old record.

Bradley has been concentrating on speed as preparation for a 10-mile race to be held at Hains Point where he will face 3,500 runners from across the United States. He is also aiming at the National Club Championships in Atlanta, Ga., where he'll compete, with the Washington Running Club, against other groups for a trip to Europe.

"Marathons take their toll mentally and physically," Bradley said. "There's a lot of psychological stress because runners psych themselves, making a committment to finish regardless of what their body tells them. It's an intense type of running."

It's easy to be fanatical about the sport, Bradley said. He'd like to make an international team, but if he did, it would be like a sandlot ballplayer making the major leagues.

Basketball: It took one overtime period for the Aero Space team to prove its power:



Star bowler Inez Buchanan

Box Score

Museum Shops, 30 All State Couriers, 22
Aero Space, 40 Museum Shops, 38 (OT)
Aero Space, 44 Face, 37
Museum Shops, 56 Face, 24
Aero Space, 75 Treasury Braves, 23

Museum Shops, 30 Avengers, 32 Aero Space, 67 All State Couriers, 32 they defeated museum shops, 40-38. But the game is being protested because, according to Willie Sanders of Museum Shops, the game ended after a foul was committed.

Oscar Waters, NASM, contends the foul

Oscar Waters, NASM, contends the foul occurred after the game ended and he does not expect a rematch. Waters' team, Aero Space, currently leads the league with a 7-0 record and, as first-half winner, is assured of a playoff spot in the post-season tourna-

Q&A

"He looks like an accident waiting to happen" may be funny to some, but in the safety business that old saw is called tombstone safety. Preventing accidents, rather than waiting until one happens and then trying to fix it up, is a major concern of Safety Specialist Vicki Hershiser in the Office of Protection Services. It is her job to inspect Smithsonian facilities for safety hazards, compile accident statistics and provide safety training for staff. Hershiser was interviewed by Torch staff writer Kathryn Lindeman.



Q. What kinds of problems do you look for during safety inspections?

A. There are a lot of hazards we need to check out—blocked aisles and exit access, tripping and bumping hazards, unsafe procedures, frayed wiring on tools. We also determine that personal protective equipment is at hand—goggles, gloves, eye washes, machine guards and so on. Machinery has to be checked for proper maintenance, too. We report problems we find to the director, building manager, fire inspector or anyone else who needs to know and recommend ways to correct them.

Q. Where do your inspections take you?

A. Some of the more unusual places are the museum rooftops. I've gone up the straight stairways and through hatches to check out possible problems. I've also helped investigate the noise level in the National Gallery's pistol range, where our guards train, to make sure the noise was not greater than the federal limit allowed.

Q. How do you use the accident statistics you compile?

A. Keeping records is really important to help identify a problem area. When accidents keep happening at a certain place, you need to check out what's wrong. If there are repeated falls, something as simple, but dangerous, as a loose tread could be causing it. Annually, we send our statistical summary to the Occupational Safety and Health Administration of the Department of Labor.

Q. How do you try to raise employees' safety consciousness?

A. We provide training for employees at the request of a director, building manager, supervisor or others. Sometimes it can mean education for a very specific problem, such as how to lift properly for a group with a lot of back injuries. We have a good series of five short films on different types of accidents. Part of my job is to investigate employee complaints and areas of visitor accidents. We also give safety orientation for guards.

Q. Is safety an unusual field for a women? A. Safety is a field that's just opening up for women. There aren't that many women in it now, but a lot are studying safety in colleges and universities. The passage of the OSHA Act in 1970 making compliance with certain safety rules mandatory has increased awareness. One of the limitations for women in the past has been that men are generally taught more about machinery. So in my job there is also the challenge of learning about machines along with the basic safety procedures. I started this job almost a year and a half ago and spent a year as a trainee. I take safety courses and attend professional meetings to learn more and broaden my experience.

Q. Do you need special equipment to make safety inspections?

A. Safety shoes and safety glasses are needed for inspections in certain areas. I take a respirator to check out a dusty area. Respirators can range from a simple face mask to one with air supply tanks. We protect ourselves from toxic vapors and dusts with these respirators. You can get used to an odor and not even realize after a time that it is affecting you.

Telescope Begins Operation in May

By James Cornell

The Smithsonian Institution and the University of Arizona will officially begin operations of the Multiple Mirror Telescope at the Mt. Hopkins Observatory in Amado, Ariz., on May 9.

The Multiple Mirror Telescope, or MMT, represents the first major departure from conventional telescope construction in more than a century. Instead of using a single large mirror, the MMT employs six separate ones, with the light gathered by each brought to a common focus and maintained as a single image by a unique active optics system. Scientific and engineering innovations have made it possible to create in the MMT a very large, yet relatively compact and lightweight telescope at significantly lower cost than conventional telescopes of comparable size.

In addition to serving as the prototype for even larger telescopes of the future, the MMT also will be a powerful tool for today's astronomical research. Moreover, the MMT represents fruitful cooperation between a federal institution and a state university, with both organizations contributing as full partners in its design, construction and operation.

The two organizations will celebrate the successful completion of the instrument—and inaugurate its research future—with a ceremony and other special events in Tucson and at Mt. Hopkins beginning May 9.

During the day, the MMT scientific staff will host a symposium on "The MMT and the Future of Ground-Based Astronomy" on the University campus in Tucson. Invited papers will cover the concept, construction and planned use of the MMT, as well as the future of ground-based astronomy, particularly in the visible and infrared regions of the spectrum.

That evening, there will be a special dedication dinner and opening ceremony, also in Tucson. Members of the Smithsonian Board of Regents, congressional leaders from Arizona, and scientists from around the world are expected to attend.



flora smithiantha

By James Buckler

Everybody agrees that the shamrock is virtually synonymous with St. Patrick's Day, but even the Irish can't seem to agree on what kind of plant it actually is.

Some people claim that the true shamrock is the European wood sorrel, Oxalis acetosella, while others are equally convinced it's white clover, Trifolium repens. One splinter group thinks St. Patrick's plant was watercress. Dozens of other would-be experts redefine the plant to their own liking.

St. Patrick used a trifoiliate plant as a symbol of the Trinity to illustrate his sermons during the campaign to convert the Irish to Christianity. The climax of his effort, the driving of Ireland's plague of snakes into the sea, was accomplished with a wave of the shamrock, according to legend.

By the 19th century, the shamrock's symbolism had expanded to include love, valor and wit, as in Thomas Moore's poem, "Oh, the Shamrock."

And today the plant is at least one symbol of the revelry associated with St. Patrick's Day. Perhaps the reason that the Irish ship large quantities of the European wood sorrel to England for the holiday is that they prefer to keep the clover in Ireland as the true shamrock. Rather than try to solve

the riddle, why not grow both plants and decide for yourself?

Oxalis acetosella can be grown as a houseplant along with other bulbous, tuberous or rhizomatous oxalis. The plant, a native of Europe and north and central Asia to Japan, has silky rhizomes and bears an early spring flower that is white with purple or rose-purple veins. The three-part leaves may close at night, as do prayer plants. Propagation by division of the rhizomes in early autumn should yield blooming plants indoors in late winter or early spring.

After blooming, the plants should be removed to a cool cellar or cold frame for a resting period. Potting soil should contain equal parts of loam, sand or perlite, and peat moss. Night temperatures should remain around 55 degrees.

The white clover, Trifolium repens, is a low, creeping perennial which blooms all summer. While many people consider clover to be a weed, others plant it deliberately, adding it to lawn mixtures because of its durability and dark green color during hot weather. For growing indoors, it should be planted in 3-inch pots around the first of January to be fully developed by St. Patrick's Day.

The Office of Horticulture is growing the *Trifolium repens* cultivar, True Irish, for sale in the Natural History Museum Shop beginning March 12. Seeds for this variety are sold by Parks Seed Co., Greenwood, S.C. You may inspect both the white clover and the oxalis versions of shamrock at the Castle's east door during the month of March.

Warren Abbott's illustration (above) of the oxalis (on the right) and the trifolium may help you decide which is the true shamrock. No matter about the confusion—don't let it deter you from sporting a shamrock on St. Patrick's Day!

PEONIES... This 19th-century Japanese fabric stencil is a selection from the exhibition, "Japanese Collections in the Cooper-Hewitt Museum" which will open on April 3 and continue through May 27, concurrently with "MA, the

Japanese Concept of Time and Space," which opens April 10. Both exhibitions are a part of the international symposium "Japan Today," to be celebrated in five U.S. cities, including New York and Washington, beginning in April.

Hiring Thaw

Under Secretary Michael Collins has informed all heads of SI bureaus and units that the hiring freeze has been lifted. OMB's letter of Jan. 29 removed the limitation, which had been in effect since Oct. 28, 1978. SI's overall employment ceiling has not been reduced.