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Michigan State University

Feb. 3, 1972

# Admissions decline--a state trend

MT. PLEASANT - Next fall's freshman class could well be the smallest in years among Michigan's state colleges and universities.

Applications for admission have declined throughout the state and many officials are beginning to suspect that the drop-off is part of a trend - perhaps a national trend - caused by a sagging economy and changing patterns in college attendance, according to a survey taken by the information services office at Central Michigan University.

Of nine Michigan state colleges and universities checked, only two report an increase in applications for admission.

At Ferris State College a 5 percent increase is being attributed to growing interest in the school's nationally recognized programs in vocational and technical education, while at MSU the increase is slightly more than one-tenth of one percent.

Applications among first-time MSU freshmen through January are about 80 ahead of a year ago. In-state applications are up by 524, and out-of-state applications have decreased

Others are experiencing a decline. At Western Michigan applications are running 29.7 percent behind the total at this time a year ago. Central Michigan reports a 29 percent decline; Grand Valley State, 20 percent; Eastern Michigan, 10 percent. Northern Michigan is down 9 percent; Wayne State, 5 percent, and even the University of Michigan is down 1 percent.

WHAT'S BEHIND it all? Many (Continued on Page 5)

# Procedures ready for Council

A revised set of interim faculty grievance procedures has been prepared by the ad hoc committee on faculty rights and responsibilities and grievance procedures, and is ready to go before the Elected Faculty Council (EFC).

The Steering Committee of the Faculty has indicated that an EFC meeting could be called before the March Academic Council meeting.

The EFC began discussing proposed

grievance procedures last fall and in December sent the document back to committee to consider questions of ambiguity and legality. (News-Bulletin, Dec. 2, 1971).

The new version includes some re-ordering of sections and includes certain new provisions, based on EFC

\*University Hearing Board (formerly called judicial board) is no longer proposed as an appeals board for cases originating at the college of department levels. It is now proposed as a board to hear cases originating at the University level. Cases at the department level could be appealed at the college level. If not appealed, these cases would be forwarded to the president, so that no department-level grievance is heard by a University - level board. College level cases could be appealed to the University Appeals Board, as could cases originating at the University level.

\*Decisions of college hearing boards, University Hearing Boards (if a decision is not appealed) and University Appeals Boards are forwarded to the president, who may, for stated cause, return the decision to the appropriate hearing board once for reconsideration. The president must, within 60 days, concur with a decision and direct appropriate action for implementation, or overrule the decision, giving written reasons for doing so.

\*The position of Faculty Grievance Official (FGO) has been strengthened in the new proposal by requiring that he reccomend the grievant to "the appropriate channel," such as the department, college, Faculty Tenure Committee of Anti-Discrimination Judicial Board. And the FGO would be required to "make every reasonable effort" to resolve grievances informally.



-Photo by Dick Wesley

### World's first

Nuclear physicist Walter Benenson checks the exposure of a photographic plate used to verify the existence of illusive silicon-25. Benenson and colleagues at the Cyclotron Laboratory are first in the world to determine the masses of four such particles. See story, page 6.

#### And inside . . .

- ... A guide to economic survival,
- ... The voice of Spartan sports, page 2
- ... Campus dining, pages 4 5
- ... Tombstone art, page 6

# How MSU almost became part of U-M

Can you visualize MSU and the University of Michigan as a single institution located in Ann Arbor with a student body of perhaps 75,000 students?

Nearly nine decades ago this might have become a reality. A plot to shift MSU (then Michigan Agricultural College) to the Ann Arbor campus was hatched in 1863. A battle raged in the Michigan legislature on this question for six or seven years thereafter.

This crucial educational crisis is described by two historians, W. J. Beal in his "History of the Michigan Agricultural College" and Madison Kuhn in "Michigan State: the First Hundred Years."

The intrigue began in 1863, the year following passage of the Morrill Act that created the land-grant college and university system. Included in the act were provisions for grants of land that could be sold, with the money used for endowment of a college "to teach such branches of learning as are related to agriculture and the mechanic arts."

MICHIGAN AGRICULTURAL COLLEGE had been founded by the Legislature a few years earlier in 1855 and is now considered a pioneer of the land-grant system. Up to the time of the land-grant bill, U-M officials had paid little heed to the struggling little college with a half-hundred students located in the malaria - ridden swamps and wilderness of south central Michigan.

Although U-M administrators previously had tried halfheartedly to establish agricultural education courses on the Ann Arbor campus, they were spurred into new action with the passage of the Morrill Act.

The quarter million acres of Michigan land that was up for grabs precipitated the opening rounds of the legislative battle in Lansing. Early in 1864 a majority report from a joint legislative committee proposed to convert the agricultural college buildings and farms into an annex of the state reform school and assign the Morrill land to the U-M.

Main Legislative support ostensibly was to save the annual \$10,000 appropriation to the agriculture college and to permit students to live in a region of "undulating beauty, watered by the winding Huron . . . a country rich, beautiful, ornamented with substantial dwellings of intelligent agriculturists. The proposal was supported by many editorials and letters in the newspapers of the state, some from the friends of the university.

The editor of the Ann Arbor Argus wrote: "We have long regarded the institution (at East Lansing) as the fifth wheel of a wagon, an entirely unnecessary addition to the educational institutions of the state."

BUT MANY OTHERS came to the defense of the college with a minority legislative report and a stream of letters and editorials. They contended that the U-M had no room to spare and that new buildings would be needed at Ann Arbor, as well as a farm with its equipment.

Many other arguments were raised to keep the agricultural and mechanical teaching in East Lansing, but the most telling was the question raised concerning the use of the income from the Morrill grant. It was obvious that the federal government intended that this endowment be applied to educate farmers and mechanics. Doubts were expressed as to just how the U-M Regents would use the income. There were implications that it might go toward the education of students of law, medicine, and the liberal arts.

(Continued on Page 2)

Property ARREST NO

## Jim Adams: The voice of Spartan sports

Just several days before he was to graduate from East Lansing High School, Jim Adams happened to notice in a State News want ad that WKAR radio was auditioning student announcers for summer term.

Adams made a voice tape and began working at the station while still in high school. And with the exception of brief side trips to Kalamazoo and Waterloo, Iowa, he has worked at WKAR since 1948, broadcasting MSU football, basketball, and baseball in addition to daily sportscasts.

Once a week he moves in front of the television cameras of WMSB to co - host "Spartan Sportlight" with associate sports director Terry Braverman.

"I guess I've wanted to do sports broadcasting for as long as I can remember," Adams said. "Even in grade school during the soccer games at recess, I'd be playing and doing the play - by play."

The first big break of Adams' career came in the fall of 1948 when WKAR went on FM and began to broadcast basketball games. Bob Shackleton, who

is now the director of alumni relations at MSU, was the sports director and asked Adams to do the "color."

In the summer of 1963, Shackleton moved up to program director at WKAR and offered Adams the job of sports director, a job he's held ever since.

In 24 years of broadcasting, Adams has no trouble recalling his greatest moment: The 1957 NCAA regional championship at Lexington, Ky. MSU won its Friday night game (while Adams was back in Lansing broadcasting a high school game) to move into the finals against Kentucky.

Saturday morning Adams was handling the public address chores at a swimming meet when he got an urgent phone call from Lexington. Shackleton had come down with a severe case of laryngitis and Adams had to catch the first plane south to fill in for him. He arrived an hour before the game, not even enough time to be nervous about his first bigtime broadcast. That night, MSU scored its biggest basketball victory ever, beating Kentucky 80 - 68 after being behind by 12 at halftime.

"It's really funny," Adams noted, "but even years after the game, people came up to me and said, 'hey, I remember you broadcasting that Kentucky game'."

BUT THERE HAVE ALSO been some times he'd just as soon forget.

Like the time in Iowa when he drove 300 miles to do a high school game and had a policeman come up to him in the second half to inform him that something was wrong with the transmitter and he hadn't been on the air the entire first half.

Or the time in Iowa when he broadcast a football game from the sidelines in a driving rainstorm that

flooded the field and destroyed his commercial scripts. It wasn't until the second quarter that a woman in the stands brought him an umbrella.

"That was the worst game of my life," he said.

Like most sportscasters, Adams has wondered from time to time whether he would take a job in professional sports if the opportunity presented itself. He doubts that he would.

"With college athletics there's no chance of getting tired or bored like in the pros," he explained. "Here, I work with a different group of people every few months. In the fall, when football is over, I move to basketball with new coaches and players. Then on to baseball just about the time I get tired of being indoors. By the time I'm sick and tired of traveling, summer comes and it's back to office work.

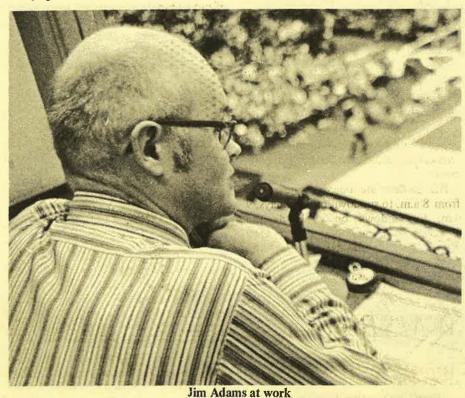
"I know too many people who hate to wake up in the morning and go to work," he added. "To me that would be horrible. I feel fortunate that I'm doing what I've always wanted to do."

For a couple of weeks each summer, Adams puts athletics aside and goes to work on his pet project, a television documentary about the assassination of Abraham Lincoln. It's something he's been working on for the past five summers.

Adams hopes to find enough time this summer to complete the filming. Then comes the difficult job of putting all the material — film, still photographs, and text — together for television. When it is completed, Adams hopes to get other educational stations, besides WMSB, interested in it.

But he'll be working under pressure this summer to complete it. For as everyone in East Lansing knows, football waits for no man.

-MIKE MANLEY



# Books

# On economic survival

A short and readable chart to economic survival in some of consumerism's most treacherous minefields has been written by a social science professor and his wife.

"Supershopper: A Guide to Spending and Saving" is written specifically for the teen-ager who is about to face the potential booby traps that go along with economic independence.

David Klein and his wife, Marymae, a free lance writer and editor, tell the fledgling consumer several hundred ways not to be separated from his shekels. And veterans of the marketplace can find some often embarrassing revelations about where last month's pay check went.

The Kleins begin by pricking the myth that affluent people buy carelessly and impulsively while the poor, economically and educationally, are adept at stretching a penny.

"Dozens of research studies during the past 10 years or so all point to the same two conclusions," the authors say in their introduction. "First, people with little education and low incomes tend to buy impulsively, pay higher prices, buy inferior merchandise, prefer the more expensive (but not necessarily better) cars, refrigerators, television sets, etc., and get less value for their money generally.

"Secondly, it's the well-educated, well-to-do buyers who think and plan carefully about what they want to buy, learn as much as they can about the qualities of competing brands, and resist the pressures of advertisers and sales clerks alike."

The authors cover some familiar ground in warning against seductive and often misleading advertising, and in pointing out the pros and cons of shopping by mail, selecting merchandise for economy versus quality, and buying by brand name only.

In showing the teen-ager how to save money at the post office, however, some useful techniques generally known only to junk mail purveyors are described. A section on cutting travel expenses and another on saving money on college applications are also especially lucrative for the book's young audience.

\_MIKE MORRISON

## MSU-U-M . . .

(Concluded from Page 1)

The State Agricultural Society, mainly responsible for the establishment of the Michigan Agricultural College in the first place, marshalled its forces to convince the legislators that the East Lansing institution should receive the federal lands.

Although the State Legislature assigned the Congressional lands to the college in 1863, the fight raged for the next six years. Bills were introduced in the biennial sessions of 1865, 1867, and 1869 to transfer the college to Ann Arbor. In each case the bills received substantial support. Although the bills failed, the pressure was enough to prevent the college from receiving any state money for new buildings.

During these years, however, the agricultural college gained more friends and a new fear obsessed many legislators. Their concern was that the next step after a move of the college to Ann Arbor would be removal of the state capitol from Lansing to the Detroit area.

The last serious attempt to combine the two institutions was in 1869. As a consequence, Michigan now has two, rather than one, of the nation's largest and most outstanding universities, as well as several other colleges and universities of national reputation.

If the battle to move Michigan Agricultural College to Ann Arbor had succeeded:

\* The University of Michigan today would probably be the largest one-campus university in the world.

\* One of the greatest intercollegiate athletic rivalries with sellout attendance of 78,000 to 101,000 fans at annual football games wouldn't exist.

\* U of M students would have been deprived of the joy of poking fun at "Silo Tech" and "Moo-U."

-W. LOWELL TREASTER

### MSU News-Bulletin

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## Campaign '72

Items for listing in "Campaign '72" should be of interest to and involve faculty and staff, and should be activities on the campus.

An organizational meeting for faculty and staff interested in working on the McGovern presidential campaign will be held Wednesday, Feb. 9, at 8 pm in Room 31 of the Union. Representatives from the legislature and area campaign efforts are expected.

## Recital to be held Friday

Elsa Ludewig Verdehr, clarinetist and David Renner, pianist, both members of the music faculty will be heard in concert at 8:15 p.m. Friday, in the Music Auditorium.

The program will include "Sonata Concertante in B Flat Major" by Franz Dazni, "Three Minatures" by Krzystof Penderecki, and "Five Dance Preludes" by Witold Lutoslawski. Penderecki and

Lutoslawski are noted contemporary Polish composers. Mrs. Verdehr will also perform Carl Maria Von Weber's "Quintet, Opus 34 for Clarinet and Strings" with the Beaumont String Ouartet.

Mrs. Verdher, who is a member of MSU's Richards Woodwind Quintet, holds the doctor of musical arts degree and a performer's certificate from the Eastman School of Music.

# Around the campus: A weekly review

## Women plan organization

About 40 women met last week in the Union to discuss further the organization of an advisory commission on women at MSU.

They decided to establish a steering/planning committee which would exist for three months to:

- \* Define issues concerning the status of women at MSU.
- \* Assume the role of women's advocate.
- \* Develop a proposal for future
- action.

  \* Hold monthly publicized open

The steering committee would be established during a two - week period (publicized by the Office of Equal Opportunity Programs) when any woman interested in serving on the committee could submit her name and other relevant information (such as position within the University, marital status, etc.) to EOP staff member, Olga Dominguez, by Feb. 15.

The list would be submitted to President Wharton, who would be asked to select a representative group of at least 12 women to serve on the committee. Wharton would also be asked to suggest to the women's supervisors that they be allowed release time to serve.

Upon selection of the steering committee, a mass meeting of interested women would be called by Dolores Bender, director of off campus housing and elected "convener'. of the group.

The organizational plan follows three weeks of meetings of interested women and women's group representatives. The women originally vetoed the idea of establishing an advisory committee to EOP, but have decided to work with EOP at least in the steering committee stage, at EOP's invitation.

### Deadline set

The Center for Urban Affairs is accepting applications until Feb. 20 for teaching and research assistantships, and urban internships for the 1972 - 73 academic year. Information is available at 145 Owen Hall.

## AC discusses general ed.

The decision to modify - or not to - the University's general education program won't be a hasty one. The Academic Council spent about an hour and a half debating the topic Tuesday, and members were really just warming to the issue when adjournment was imposed at nearly 6 p.m.

Deliberations of the general education proposals will be continued later this month in the Council, and some changes in these proposals are possible as soon as this week when the educational policies committee meets to discuss initial Council reaction to the document.

Nearly a dozen faculty and students spoke to the issue Tuesday, and their comments ranged from general endorsement of the general ed modifications to outright opposition. One student member was prepared to move to strike the provision for a degree program in general studies.

Several faculty members contended that no case had been made to show that the present general education program needing changing, and a few called for a definition of general education. Others expressed concern that to open the job of general education to all colleges and units might lead to duplication and competition.

No action was taken on the proposal Tuesday, and the next Council session (to continue discussion on general eduction) has not yet been set.

In other items the Council:

\*Voted to instruct the faculty steering committee to devise a policy for making available tapes of Council meetings. It was informally noted that the Voice Library would be a logical location for taped Council proceedings. Another motion granted release of the transcription of the Nov. 30 meeting to Bob Repas, professor of labor and industrial relations. Repas has asked for a copy of that portion of the discussion leading to his censure by the Council. A straw vote among Council members favored further discussion of the censure itself at the March meeting.

\*Elected Marjorie Gesner, professor of history; Dozier Thornton, associate professor of psychology; and Paula Fochtman, a junior, as the Council representatives to the special committee to select a vice president for student

### Black police conference

The role of the black police officer, the pressures he faces, and ways to improve urban police - community relations are questions to be discussed this spring during a conference on "The Black Police Officer in Detroit"sponsored by the MSU Center for Urban Affairs and the Detroit Police Department.

More than 2,000 persons are expected to participate in the programs which will be run simultaneously for 2½ days at five locations throughout Detroit.

Videotaped interviews with national experts commenting on the critical issues affecting black police officers will be presented at each conference location. These presentations will be followed by a speaker and then a reaction panel.

While the conference will provide a national focus on the plight of the black police officer, the primary objective will be to lessen the pressures in Detroit by stimulating community awareness and participation in improving the situation.

A series of recommendations is expected from the sessions, and the bulk of the funds provided for the conference will be allocated to support specific follow-up projects in the community in the next year. The conference is to be scheduled in late April or early May.

### Busing debate

The debate on the school busing issue - between Robert Green, director of the Center for Urban Affairs and Irene McCabe of the National Action Group - will be broadcast Friday at 1 p.m. on WKAR - AM and at 7 p.m. on

## Hidden Lake is honored

The Hidden Lake Gardens at Tipton have received an award from the Michigan Horticultural Society, for "accomplishments in the field of horticulture."

Hidden Lake Gardens, established in 1926 by Adrian businessman Harry A. Fee, encompass 620 acres connected by seven miles of improved roads and five

miles of hiking trails. More than 1,550 different species and cultivars, representing 153 genera, have been planted since 1960.

The gardens conservatory complex includes a center containing a library, auditorium, meeting rooms and sales counter, a new plant conservatory with tropical and arid domes and a temperate house.

The gardens are open to the public from 8 a.m. to sundown on weekdays, 9 a.m. to sundown on weekends and holidays. The plant conservatory is open 8 a.m. to 9 p.m. on weekdays, 9 a.m. to 7 p.m. on weekends and holidays. Guided tours are available.

## WMSB goes worldwide

Forty international cities will soon be enjoying WMSB - produced programs, courtesy of the United States Information Agency.

U.S. embassies in the cities - which include Bogota, Mexico City, Tel Aviv, Beirut, Lagos, Madrid, Stockholm, Saigon, Hong Kong, and Warsaw - will show films of the videotapes at U.S. Information Service cultural centers. The films will also be available to local and national television systems.

The programs currently slated for distribution to U.S. embassies are: Three Young Musical Artists recitals (two with pianist Barbara Nissman and one with pianist Paul Jones); nine Beethoven: Sonatas for Violin and Piano programs with violinist Paul Zukofsky and pianist Gilbert Kalish; and one Van Cliburn International Piano Competition program with pianist Mark Westcott.



-Photo by Dick Wesley

William B. Hawley, acting dean of education, was honored recently by more than 400 College of Education Alumni. He was presented with a Distinguished Honorary Alumni Award. Keith Goldhammer, currently at the University of Oregon, will take over as dean July 1.

# On other campuses

SALARY FIGHT AT U.W. Pres. John C. Weaver of the University of Wisconsin has asked that state's governor to help provide funds to pay UW faculty salary increases retroactive to last July 1. The Wisconsin Legislature's failure to approve state budgets by July 1, coupled with the Phase I federal wage freeze, prevented UW faculty from getting raises until Nov. 13. The state's attorney general has ruled that raises could not be paid retroactive to July 1. And even though the UW regents approved salary increases on Oct. 7 and 8, the state has only provided funds for raises effective Nov. 13. A court suit by UW is possible.

APPROVAL TO CONSULT. Regents' regulations at the University of Minnesota require that faculty members who wish to engage in "recurring professional services" (consultantships, non University teaching, for examples) must seek prior approval from the regents. In a recent memo, the faculty members were asked to file statements of outside commitments.

STARTING A TOWN. Ten graduate students at Penn State University are helping develop a community "from scratch" through a seminar in the department of architecture. The students will work with professional developers in analyzing and evaluating suggested innovations covering social, economic, educational and recreational opportunities of future residents. Faculty from 10 related disciplines - from economics to agriculture to landscape architecture - will serve as resource advisors.

NEW MINORITY AID. The University of Iowa has established what is believed to be the first journalism scholarship for minority students. The idea, developed - and initially funded - by a doctoral student in mass communications, is to award a tuition scholarship annually to a minority group member who will be eligible for other special support service funds.

GENERAL ED AT UTAH STATE. A new general education program has been adopted at Utah State University, whereby students may enroll in courses designated by a General Education Committee, or may suggest new courses or even help design them. Acceptable alternatives include individual study, travel and research participation. Under the old system, students were required to take a specified number of credits in courses in humanities and biological and physical



Through the salad bar at Crossroads Cafeteria



Gathering at Crossroads for lunch

# Dining in

University faculty and staff (and choose from on campus. Coordin manager of dormitories and food cafeterias and one restaurant (not inc primarily to serve students), are open

\* The State Room in Kellogg Ce on campus — is open Monday through for dinner, 5:30 to 8 p.m. It is also clunch 11:30 a.m. to 2 p.m. and dinn serves breakfast from 8 to 11 a.m. an \* La Ventura, the cafeteria in Ke

for breakfast 7 to 10 a.m. and for lur

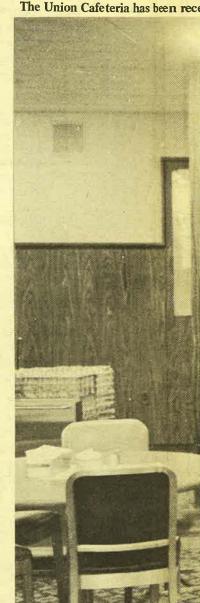
\* The Union Cafeteria - recently personal dining, Thorburn says, in



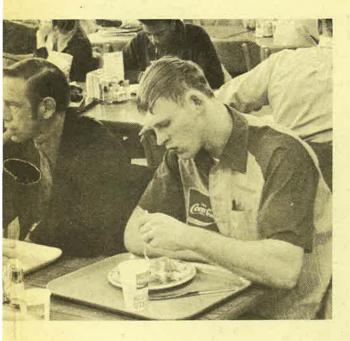
The State Room at Kellogg Center provides the only table service on campus.



Everything from a sandwich to a steak is available at the Union Grill



The Union Cafeteria has been rece



Spanish style decor in LaVentura, Kellogg Center's cafeteria



# in MSU's shadows

aff (and students) have a variety of eating facilities to Coordinated through the office of Lyle Thorburn, and food services, the University's two grills, three t (not including residence hall grills which are designed are open the following hours:

ellogg Center — the only restaurant with table service by through Friday for lunch, 11:30 a.m. to 2 p.m., and it is also open Saturday for breakfast, 8 to 11 a.m., for and dinner 5:30 to 8 p.m. On Sunday the State Room 1 a.m. and dinner from 12:15 to 6 p.m.

ria in Kellogg Center is open Monday through Friday and for lunch, 11 a.m. to 2 p.m.

recently refurbished to provide more comfortable and says, including carpeting, wall paneling and room

dividers — is open Monday through Friday for lunch, 11:15 a.m. to 1:15 p.m. and for dinner 5 to 7 p.m. The cafeteria is closed Saturday but open Sunday for dinner, noon to 2 p.m.

\* The Union Grill, also recently refurbished with an expanded menu including items from hamburgers to fish to steak, is open for breakfast through 11 p.m.

\* Crossroads Cafeteria in the Center for International Programs is open Monday through Friday for lunch, 11 a.m. to 1:30 p.m.

\* The Crossroads Grill is open Monday through Friday 7 a.m. to 4 p.m. and to serve evening classes, 7 to 9:30 p.m.

All facilities do catering for private parties or meetings, and while alcoholic beverages may not legally be sold, Kellogg Center will serve alcoholic beverages at catered affairs in the building if the patron provides the beverage.

Also at all facilities, MSU employes may charge their meals to their office accounts sdgh

Photos by Bob Brown

been recently refurbished to provide more personal dining areas.



### Admissions...

(Concluded from Page 1)

factors, say admissions counselors at the respective schools.

"Our guess has been that the economy is a strong factor," says James Bower, associate director of admissions at U-M. "Changes in the economy have caused parents to decide that their children cannot venture far from home to attend school."

"The traditional college attendance pattern is changing," reasons Russell Gabier of Western Michigan. "There's less pressure from the draft and more students are feeling that they can wait awhile before deciding on college."

"It's part of a national trend," explains Austin Buchanan of Central Michigan. "The fact that people are finding that degrees don't mean jobs, the birth rate has slowed, changes in the draft law, the fact that more students are entering terminal programs, and economic conditions are all part of it.

"I think we are now in a period where admissions are going to level off. Maybe not continue to drop but maybe not to grow as many thought they would."

BUT SO FAR the declines have had virtually no effect on the major schools' admission standards.

The C-average high school senior will still find admissions prospects limited at most schools. At U-M, for example, "unless a student has a pretty strong B in a college preparatory program and SAT scores of 1,000 or 1,100 the chances of admission are not very good."

Because most Michigan schools admit the student to the university and not to a particular field of study, admission requirements for specialized study alsoremain rigid.

Disadvantaged students retain some admissions advantage through special enrollment programs at most Michigan state colleges and universities, but some special opportunity programs are being phased out and admissions also are being limited.

COLLECTIVELY, THE feeling among Michigan admissions people is that the economy has had the greatest impact on the dwindling number of colege applications.

"I think the economy has a great deal to do with it," says Ralph Gilden of Eastern Michigan. "Times are tight."

Information gathered from a cancellation study made last fall at Western Michigan supports his view.

The WMU survey was taken among freshmen and transfer students who cancelled admission before the beginning of the fall semester. Some 1,353 beginning freshmen and 718 transfers were asked why they had cancelled. Economic conditions was the reason most often given.

What impact tuition increases will have on the admissions picture throughout the state is still uncertain.

In the past year tuition has been increased at Central, Western, Northern, Eastern, Wayne State, Grand Valley, Ferris and the University of Michigan.

And, at least at U-M, there has been some effect on the number of applications from out-of-state.

So far this year out-of-state applications are down 13 percent at U-M. A year ago the university experienced a 20 percent out-of-state decline; overall a 15 percent drop in admissions.

"Our guess last year was that with our increases in tuition we might be pricing ourselves out of the market," observed lames Rower

Science notes

# Physicists uncover illusive silicon-25

Scientists here have uncovered a substance called silicon-25 which disappears so fast and is so rare that all previous attempts to capture its secrets of mass and

This Tuesday (Feb. 1), at a meeting of the American Physical Society in San Francisco, MSU physicists reported that they had achieved the necessary art of squeezing the secrets from the short-lived silicon fragment.

As is so often the case in science, it was the art of applying technique that meant the difference between success and failure.

"There is no real breakthrough in the technique because other people have used it. It's just that it's the hardest case that's ever been done," says MSU physicist Walt r Benenson.

The method he and physicists J. Driesbach, Ivan D. Proctor, F. Trentelman and B.M. Preedom who worked in the MSU Cyclotron Laboratory came up with was similar, in part, to bullet-catching.

A bullet-catching trick used by some ballistics experts is to fire a bullet through a barrier which slows it to a halt without damaging it too severely. The final barrier may be layers of paper, or magazines, and the bullet may stop on a page of an old "Post" magazine.

"We used enough sheets of metal in front of a photographic plate to slow the particles of helium-6 so that they leave a big and bright track," says Benenson.

In this case, the photographic plate served as did the old "Post" magazine. That is where the helium particle was stopped and detected. Using information on its energy and mass, they calculated the energy and mass of silicon-25.

Some of the particles they didn't want were stopped before they could reach the photographic plate. Others went through the plate so fast that they didn't leave much of an exposed trail on the photographic emulsion.

Without the absorbers and special photographic plates it would have been like a blindfolded man with a one-shot camera trying to take a picture of horse number 25 in a one-minute stampede of 100,000 wild horses, because Benenson says, "there are about 100,000 other particles striking the plate at the same time as the

"Our breakthrough has been to get all of the low-lying energy levels," says the researcher. "The interest in this is that these nuclei are symetric with other nuclei that are known. The differences between other nuclei of the same mass are something you can calculate and are very closely related to the actual structure of the nucleus: How big it is, what it's shaped like, how fast it's spinning on its axis, and all those things. And that's what we're after: Nuclear structure."

With all cyclotrons-sometimes flippantly called atom smashers-in the world, no one ever described the illusive particle born from the helium-silicon collision. All anyone knew was that silicon-25 didn't last very long.

MSU physicists said they don't know what importance, if any, the rarely-discovered piece of matter may have.

"Silicon-25 had been observed before," says the physicist, "but only its lifetime had been measured. We determined its mass and all of its energy levels."

One reason that leading nations care about the structure of matter is that they seldom know where the watershed of such knowledge, forged into a technology, may lead. Bombs, rays, power plants and medical technology are only four past examples of previously unpredicted products of such knowledge.

Besides their own scientific skill and art, do the MSU physicists accredit anything else to their successful determination of previously unknown masses and energy levels of various kinds of matter?

"The intensity and energy resolution of the MSU cyclotron is the best in the Benenson.

Besides being first to determine the energy levels and mass of silicon-25 the MSU physicists also reported their determination the previously unknown masses of three other heavy nuclei: nickel-55, cobalt-47, and iron-51.

Contributions from the research of more than 20 Michigan State University physicists were presented at San Francisco meeting.

-PHILLIP E. MILLER



-Photo by Dick Wesley

Chet Trout and "early American art form"

### He does tombstone art

Chet Trout rubs everything the right way - particularly tombstones.

Recapturing a true early American art form, Trout has a collection of more than 50 tombstone rubbings from the earliest days in American history.

Part of this collection, including a rubbing dated 1681 and another from a tombstone of a Mayflower pilgrim, are currently on display in the MSU Museum.

Trout is the chief preparator of exhibits at the museum but in his free time he continues his work as a master watchmaker, painter and "rubber."

There is more to tombstone rubbing than simply transferring the impression.

Trout says that it is fascinating to trace the evolution of art work on headstones, for as religion and culture progressed, so, too, the tombstones changed. The skull on the earliest American headstones gradually changed into cherub around 1790 and then later into the mass produced urn and willow markers found today.

These patterns developed, Trout continues, despite the fact that the "artists" had no contact with each other and rarely saw examples of their counterparts' work.

"In fact," he says, "because the population was so sparse before 1800 it could not support an actual tombstone 'artist.' Rather the relatives of the deceased simply called on someone who had the tools to do the cutting, i.e. the blacksmith, brick or stone mason, the leather worker or the woodcarver.'

To make a rubbing, Trout explains, one needs a roll of masking tape, a selection of large sheets of strong bond paper such as rice paper, a selection of colors in lumber marking wax crayons or black heelball (a heelball is used by shoe cobblers for shoe blackening) and a small brush.

"First, the stone should be cleaned by brushing it carefully, being sure not to damage the stone," Trout says.

"Then, the paper should be taped to the tombstone over the area you intend to reproduce.

"Rub lightly to establish the pattern and then with more firm strokes all in the same direction go over the pattern again until the design stands out clearly on the paper.

"When finished the rubber should always make sure that all tape is removed from the tombstone and that the area is picked up," Trout adds.

Part of the satisfaction in making a rubbing, he says, is in finding the tombstones and meeting people in the process.

Trout, who has traveled extensively throughout the eastern part of the U.S. in search of cemeteries, says that most of the good cemeteries are deserted and are up on hilltops where there are no

Included in Trout's collection and museum display are brass rubbings made in Cathedrals in the British Isles. The oldest one on display was made in St. Patrick's Cathedral and is dated 1572.

-BARBARA MCINTOSH

# What role for faculty in selecting top officers?

Nearly three years ago the Academic Council established a committee whose charge was to develop procedures by which the president and other principal officers of the University were to be appointed.

The first part of that charge was completed and accepted by the Council, administration and Trustees - and these were the procedures by which Clifton R. Wharton Jr. was selected MSU's president.

But whatever became of the last half of the charge?

According to President Wharton: At least two drafts were prepared by the committee, the last one being submitted informally to the executive group (top University officials) for reaction prior to submission to the Academic Council. There was also an informal discussion with the Board of Trustees.

There were some strong objections in the executive group to some provisions of the draft, Wharton said. He cited a difference of opinion on definition of chief University officers - the committee's definition was broad, including such positions as the University attorney and staff people within the provost's office.

The discussion with the trustees was held, Wharton said, because it was known that some members had strong feelings on procedures used to date, and their opinions might be useful for consideration before the committee went through the entire exercise of sending the proposals through the Council and up to the Board.

No vote was taken by the trustees, Wharton stressed, but it was thought that a significant majority of the members would not approve in any form the procedures for selection of top University officers. Trustees said they would look to the president for recommendations but were not concerned about how the recommendations were arrived at, Wharton said.

And so ended the committee's deliberations.

Despite the fact that no formal action was ever taken on such procedures, President Wharton has incorporated some of the recommendations for use in the selection of a vice president for student affairs - a position which has been

vacant since June.

But because the original committee was established by the Academic Council, and because the Bylaws for University Governance (which have been approved by the Board of Trustees), provide for the advice and consultation of the "appropriate faculty" in selection of principal University officers other than the president (Section 4.2), - Steering Committee member Thomas Greer, professor of humanities, is concerned about the unfinished task.

So Greer has proposed that a new committee be set up to develop the collaboration procedures called for in the bylaws. And the matter should be placed on a future Council agenda possibly March.

### **BULLETINS-**

**AEBLESKIVERS!** 

Tickets can now be purchased from members of Faculty Women's Associa-

tion for the annual aebleskiver luncheon to be held at 11 a.m., Saturday, February 12. Proceeds provide scholarships for women students at MSU.

TROPICAL STUDIES

The Tropical Studies Group will meet for lunch at noon, Wednesday, Feb. 9,

in Parlor B, Crossroads Cafeteria. A lecture by Van C. Johnson, "Higher Education of Biologists in Vietnam," will follow in 204 International Center.

**CHEMISTRY** 

Five distinguished scientists will be visiting the Department of Chemistry

during the next few months as part of a series initiated in 1970 under the department's Center of Excellence grant. Speakers include: L.B. Rogers, Purdue University, Feb. 16-18; A.J. Bard, University of Texas at Austin, March 6-10; J.A. Berson, Yale University, March 13-15; D. Cram, University of California at Los Angeles, April 17-19; and G. Eichhorn, Dept. of Health, Education, and Welfare, May 21-23.

ANTIQUE GROUP

The Faculty Folk Antique Group will meet at 9:30 a.m., Tuesday, February 8.

Mr. and Mrs. William Wallner will speak on "How to Identify Period Furniture" in their home at 5229 Park Lake Road.

CICERO

A lecture on "Cicero: The Human Side" will be given by William C. McDermott

at 8 p.m., Wednesday, Feb. 9, in the Captain's Room of the Union. The lecture is sponsored by the Romance Languages department.

BWC INSTITUTE

The MSU Business Women's Club Institute will be held Tuesday and

Wednesday, Feb. 8 and 9 in the Union. Following the theme of "Communication," Jack Bain will speak at an 11:30 luncheon Tuesday on "Don't Take It For Granted," and Anne Garrison will conduct a workshop at 1:15 p.m. on "That Is Not What I Meant At All." On Wednesday, John Lewis will speak on the University Services, Materials Management Division at 1:15 p.m. Registration will be held at 1 p.m. both days on the second floor concourse.

and more

### CONFERENCES -

Feb. 4-5

State Park Concessioners

Feb. 6-11

State Information Officers I

Feb. 7-9 Feb. 7-9 Petroleum Jobbers Management Inst.

Criminal Investigation Courses Part I

Feb. 7-11

Occupational Safety & Health

Feb. 8

School Boards & Administrators

Feb. 9-10 Mich. Forestry & Parks

All conferences will be held in Kellogg Center unless otherwise noted.

Students and faculty members are welcome to attend these continuing education programs. Those who are interested should make arrangements in advance with the Office of University Conferences, 5-4590.

### **EXHIBITIONS**•

#### Kresge Art Center

North Gallery: Contemporary paintings and prints from the Flint Institute of Arts.

Entrance gallery: Prints by New York artists Jan Gelb and Minna Citron.

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#### State News

Photographic: 301 Student Services—The 8th Annual Military Pictures of the Year competition winners are now on view. The photographs have been on exhibition throughout the U.S., overseas military bases, and at National Press Photographers Association seminars.

Methods for quality assessment of wheat flour. Mark Uebersax, 4:10 p.m.,

The implications and impact of state assessment of mathematics

Multivalence and the affinity of antibody. Fred Karush, U. of Penn-

Bayesian classification. Connie Shapiro, U. of Michigan, 4:10 p.m., 405A

sylvania, 4:10 p.m., 146 Giltner (Microbiology & Public Health).

achievement. Charles Johnson, Waterford Village School; Robert W.

Scrivens; Bryce Shaw, Flint Public Schools, 4 p.m., 304A Wells

110 Anthony (Food Science & Human Nutriton).

### SEMINARS

#### THURSDAY, FEBRUARY 3, 1972

The perspectives of policy makers and publicists. Subbiah Kannappan and Kay Wilcox, U. of Chicago, 7:30 p.m., Con Con Room, International Center (Asian Studies Center).

#### FRIDAY, FEBRUARY 4, 1972

Biological control of sugar cane moth-borer, *Diapraea sacctiaralis* in Barbados. Klaus Carl, Commonwealth Institute of Biological Control, Delemont, Switzerland, 3 p.m., 140 Natural Science (Entomology).

Cytochrome C: the oxidized and reduced structures of an ancient protein.

R.E. Dickerson, California Institute of Technology, 4 p.m., 101

Biochemistry (Biochemistry).

Stream ecosystem structure and function. Kenneth W. Cummins, 11:30 a.m., 140 Natural Science (Zoology).

### WEDNESDAY, FEBRUARY 9, 1972

Wells (Statistics & Probability).

(Mathematics).

Principle of remote sensing. Axel L. Andersen, 4:10 p.m., 168 Plant Biology Lab (Botany and Plant Pathology).

Review of taxonomy research program. Roland Fischer, 7:30 p.m., 244 Natural Science (Entomology).

Vitamin A and the biosynthesis of glycoproteins. George Wolf, Massachusetts Institute of Technology, 4:10 p.m., 110 Anthony (Institute of Nutrition).

#### MONDAY, FEBRUARY 7, 1972

Waste Utilization Laboratory. J. Garrish, 3 p.m., 103 Anthony (Animal Husbandry).

Performance of dairy beef crosses. William Magee, 12:30 p.m., 126 Anthony (Dairy Science).

Cardiovascular effects of prostaglandin A<sup>1</sup> in the dog. Janet Parker, 4 p.m., 216 Giltner (Physiology).

### TUESDAY, FEBRUARY 8, 1972

Titanocene and some other new members of the Sandwich Club and their relation to nitrogen reduction. Hans Brintzinger, U. of Michigan, 4 p.m., 136 Chemistry (Chemistry).

Effect of stimulants on germination of spores of bacilla. Olusemi Tinuoye, 4:10 p.m., 110 Anthony (Food Science & Human Nutrition).

#### THURSDAY, FEBRUARY 10, 1972

Soviet Union and China and South Asia. Robert Slusser, 7:30 p.m., Con Con Room, International Center (Asian Studies Center).

Genetic defects of sphingolipid metabolism. C.C. Sweeley, 4 p.m., 101 Biochemistry (Biochemistry).

Modular forms in number theory. M. Knopp, U. of Illinois (Chicago Circle), 4:10 p.m., 304A Wells (Mathematics).

Renal function in the neonate. Jerry B. Hook, 4 p.m., B449 Life Science 1 (Pharmacology).

Study of the <sup>42</sup>Ca(p,t)<sup>40</sup>Ca reaction. **Paul T. Debevec,** Princeton, 8 p.m., Cyclotron Seminar Room (Physics).

# MICHIGAN STATE UNIVERSITY

# Calendar of Events

#### Friday, February 4, 1972

4 p.m. Women's swimming—MSU vs. U. of Michigan and Indiana. Women's IM Pool.

7:30 p.m. Gymnastics—MSU vs. Minnesota. Men's IM Sports Arena.

8 p.m. "U.F.O."—Probing the possibility of life existing on other planets, this program portrays stories of mysterious flying saucer encounters. Tickets at door. Abrams Planetarium.

8:15 p.m. Lecture-Concert Series—The Osipov Balalaika Orchestra with its 75 singers, dancers, and musicians, will feature the celebrated Bolshoi Opera Company and Bolshoi Ballet.

Auditorium.

8:15 p.m. "A Cry of Players"—This bawdy comedy by William Gibson, set in Elizabethan England, concerns the early life of Shakespeare. This University Theatre production is a season coupon book bonus. Cash sales at door. Arena Theatre.

8:15 p.m. Faculty recital—Elsa Ludewig Verdehr, clarinetist. Music Auditorium.

10 p.m. "U.F.O." (see above). Abrams.

#### Saturday, February 5, 1972

1:30 p.m. Gymnastics—MSU vs. Iowa. IM Sports Arena.

2 p.m. Track—MSU vs. Northwestern U. Jenison.

2:30 p.m. "U.F.O." (see Feb. 4). Abrams.

7:30 p.m. Wrestling-MSU vs. Oklahoma. IM Sports Arena.

8 p.m. World Travel Series—Norm Wakeman travels "From Palm

Springs to Lake Louise." Auditorium.

7 p.m. Pony Pull. Livestock Pavilion.

8 p.m. "U.F.O." (see Feb. 4). Abrams.

8:15 p.m. "A Cry of Players." (see Feb. 4). Arena Theatre.

10 p.m. "U.F.O." (see Feb. 4). Abrams.

#### Sunday, February 6, 1972

8 p.m. ASMSU Pop Entertainment—Canadian folksinger Gordon Lightfoot, known as a "collector of familiar treasures," will perform. Tickets may be purchased at the Union Ticket

Office. Auditorium.

8:15 p.m. Graduate recital—Susan Shane, violinist. Music

Auditorium.

8:15 p.m. "A Cry of Players." (see Feb. 4). Arena Theatre.

#### Monday, February 7, 1972

8:15 p.m. "A Cry of Players." (see Feb. 4). Arena Theatre.

#### Tuesday, February 8, 1972

12 p.m. University Club luncheon—Daniel Litwhiler, head baseball coach, will speak on "College Baseball 1972."

8 p.m. Folkdancing—International folkdancing is taught for singles and couples. St. John Student Paris, 327 M.A.C.

8 p.m. Basketball—MSU vs. Illinois. Jenison.

8:15 p.m. "A Cry of Players." (see Feb. 4). Arena Theatre.

8:15 p.m. Lecture-Concert Series—The Guarneri String Quartet, with

an average age of 35, is considered by music connoisseurs to be the world's masters of chamber music. Fairchild Theatre.

#### Friday, February 11, 1972

8 p.m. "U.F.O." (see Feb. 4). Abrams.

8:15 p.m. Premieres of New Music. Erickson Kiva.

10 p.m. "U.F.O." (see Feb. 4). Abrams.

#### Saturday, February 12, 1972

1:30 p.m. Track—Michigan State Relays. Jenison.

2 p.m. Swimming—MSU vs. Ohio State. Men's IM Pool.

2:30 p.m. "U.F.O." (see Feb. 4). Abrams.

7:30 p.m. Track—Michigan State Relays. Jenison.

7:30 p.m. Wrestling-MSU vs. Michigan. Men's IM Sports Arena.

8 p.m. "U.F.O." (see Feb. 4). Abrams.

8 p.m. World Travel Series—"Chicago—Believe It or Not" is the

topic of Fred Keiffer's presentation. Auditorium.

10 p.m. "U.F.O." (see Feb. 4). Abrams.

### BULLETINS

SEMINARS ON AGING

The third of a series of seminars on aging sponsored by the MSU Volunteer Bureau will be held at 7 p.m., Tuesday, Feb. 1 in Room 30 of the Union. Leo Haakwill speak on "Retirement Roles and Activities."

SCHEDULE OF COURSES The 1972 spring term Schedule of Courses and Academic Handbook will be available for departmental use on February 4. Departmental representatives may pick up a supply in 64 Hannah Administration Bldg.

All tickets have been sold for the Feb. 9 and 11 Scholarship Shangri-la luncheons, though a short waiting list will be kept by Mrs. William Magee (349-4524) for use in the event of cancellations. Sponsored by the Faculty Folk and Newcomers Club, the luncheons are given to raise funds for scholarships for women students at MSU. For those wishing to contribute directly to the fund, checks should be made out to Faculty Folk and sent to Mrs. Martin Bukovac, treasurer, 2786 Brentwood Ave., East Lansing.

NEWCOMERS

The Newcomers Club and husbands will be attending the play "Joe Egg" at 8 p.m., Thursday, Feb. 17. Discussion and coffee will follow. Reservations for block seats must be made before Feb 4 by contacting Jean Cusick, 351-6114.

ART OPENING

There will be an opening for two new exhibits at Kresge Art Center from 2 to 5 p.m., Sunday, Feb. 6. Contemporary works from the Flint Institute of Arts and the prints of Jan Gelb and Minna Citron will be shown.

MID TERM GRADES

Special midterm grade cards will be delivered to departmental offices on Friday, Feb. 4. The grading system is printed on the face of each class card. The Office of the Registrar will make a pickup on Friday, Feb. 11, after 9 a.m. Otherwise, cards must be returned to 150 Hannah Administration Bldg. no later than 11 a.m., Feb. 11. The returned cards will be redistributed on Monday, Feb. 14, to those who requested them. For information, call 5-9596.

Patricia Grauer, Dept. of Information Services, 109 Agriculture Hall, (517) 353-8819. Deadline for submitting information is noon Tuesday preceding the Thursday publication. The calendar of events will cover an 8-day period, Friday through Saturday.