



24 Apr 1970

## The Missouri Miner, April 24, 1970

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# The Missouri MINER

UNIVERSITY OF MISSOURI - ROLLA



VOL. 56

FRIDAY, APRIL 24, 1970

ROLLA, MISSOURI

NO. 22

## Environmental Challenges

# The Urgency Of Controlling Our Technology

## University Scientists Involved In The Search For Solutions

Is the problem of pollution one for posterity or of our generation? There are big problems to face. By 1980-85 we'll all have to wear gas masks. There isn't any clean air left. (Clean air is defined as air containing less than 2,000 particles of pollution per cubic centimeter.) The average metropolitan area has levels approaching 15,000 particles per unit volume of air. The lethal level is 35,000 particles. Since July 1 (1969) grants and gifts totaling \$929,260 have been awarded to the University to support environmental research projects on the four campuses. The list of grants presented to the Board of Curators today for their approval includes an additional \$80,272 for this purpose.

This response by the University faculty to the environmental crisis reflects an historical pattern. Traditionally, universities have responded to the needs of society, helping to define issues in a rational way and offering assembled knowledge and skills in the search for solutions.

Almost from the beginning of the institution, the University of Missouri has been involved in studies relating to man and his environment. But with the increasing awareness of the urgency posed by some of the present environmental problems, more studies, involving more academic specialties, have been undertaken or are in the planning stages.

These studies represent only a small outlay of University funds. The bulk of the support comes from federal grants and industrial gifts, as the figure above suggests, and it is these sources which are making most of this research possible.

Some of the current studies are being conducted by individual scientists on each of the four campuses. Their interests are many and varied. They are studying such problems as effects of air pollution on growing plants, methods of waste disposal, and the possible harm to man's health from widespread use of chemicals, in food processing, insect control and therapeutics. All of these projects offer promise of possible clues to some of the troubling ecological problems. In addition, the University sponsors several large scale programs which bring together scientists from many specialties to work on problems of mutual interest.

Such a program is being conducted by the Environmental Surveillance Center which is housed in a group of frame buildings in a pastoral setting 10 miles south of Columbia. A grant of \$242,813 awarded recently by the U.S. Public Health Service will support this program as it moves into its fifth year.

The goal of the center is an unusual one which is attracting considerable national attention. Ultimately the center hopes to develop an "early-warning system" for environmental problems so that corrective action can be taken quickly. If such a system had been in effect a few years ago, for example, the effects of thalidomide might have been noted earlier and perhaps the resulting birth defects could have been reduced.

The center pools the varied knowledge and skills of University scientists in a dozen specialties, including medicine, veterinary medicine, engineering, agriculture, statistics, geology, computers, nuclear science, forestry, pharmacology and chemistry.

In this coordinated program scientists will consider the entire state as a kind of epidemiological laboratory. One of the researchers' particular concerns relates to the possible effects of trace elements on human health. These chemical substances are present in minute amounts in the air, soil and water but little is known yet about their effect on the human organism. Now that technology has made it possible to measure and analyze these substances, scientists are studying these elements intensively. A unique international conference on trace elements is held in Columbia each summer, bringing to the campus world renowned scientists to share ideas and stimulate further exploration.

As a first step toward collecting pertinent factual data regarding environmental problems in Missouri, scientists in the surveillance program are studying trace substances as a possible contributor to birth defects. The methodology has been designed so that the investigation can be expanded to cover practically any health problem.

For some time now the Environmental Surveillance Center has been collecting data on birth defects in people, pigs and rabbits. Swine and rabbits are being studied because they reproduce much more rapidly than humans and a vast amount of data can be collected fairly quickly. Abnormally high birth defect rates in a given area will alert the center to possible environmental hazards in those areas.

But first normal rates of birth defects for each section of the state must be determined so that deviations from those norms can be recognized quickly.

Many Missourians are assisting with this study. Physicians throughout the state are participating by reporting birth defects of newborn infants. Farmers are helping by reporting defects in piglets, through

a reporting system developed by the University's Extension Program. The State Conservation Department is assisting by examining pregnant rabbits that are killed in certain areas and reporting defective embryos.

The handling of the resulting mass of data is made possible by the use of University computers which record, store and analyze the information, plotting graphs on a map of the state to show News

When clusters of defects have been noted, a team of scientists goes into this area, for the soil, ground water, livestock, environment, etc. This pile of data is being used to build on April 16

A related program at the University offers still another opportunity to study environmental problems through an interdisciplinary approach. This university-wide program is conducted at Sinclair Research Farm, a 500-acre site south of Columbia which was a gift to the University several years ago. A grant of \$174,000 was awarded recently by HEW to continue support of this activity.

This program brings together scientists from a half-dozen specialties who are interested in the aging process and possible effects of the environment on this process. They are studying in animals certain chronic diseases and degenerative processes which closely resemble those to which man is subject.

A variety of animals have been assembled on the farm and will live out their lives there. The difference with their normal habitat will be their close observation by scientists who are continually monitoring their health, keeping comprehensive records, and charting changes as these occur.

At some point in the future the University hopes to construct a controlled environment at Sinclair Farm so that conditions can be altered and effects studied. This would permit hypotheses formed by the Environmental Surveillance group to be tested under controlled conditions. The combined programs will offer opportunities for studies not thought to be available elsewhere in the U. S.

Although both of these centers are housed near the Columbia campus, scientists from all four of the University's campuses are encouraged to participate in the studies and

the programs are coordinated on a University-wide basis.

Intercampus research relating to environmental health is also encouraged by the Environmental Health Center which is housed on the Columbia campus but which serves to coordinate studies of this kind on the four campuses. This center was established in 1965 with the expressed purpose of bringing together scientists in a cooperative effort to identify health problems existing in or created by the environment. This multidisciplinary approach helps to prevent duplication of expensive equipment and staffs and helps, too, by facilitating communication among scientists who share similar research inter-

ests.

Another intercampus program is that of the Water Resources Research Center. The University of Missouri, like other land-grant institutions, is eligible to receive \$100,000 annually from the Department of Interior for support of research relating to water supplies, contaminants, improved methods of analysis, evaluation, and the like. More than a dozen research projects supported by this program are currently in progress on the four campuses.

Further evidence of the interest of University scientists in environmental problems is suggested by research proposals from the four campuses (Continued on Page 3)

### Genesis: Last Chapter

In the end,

There was Earth, and it was with form and beauty.

And man dwelt upon the lands of the Earth, the meadows and trees,

and he said,

"Let us build our dwellings in this place of beauty."

And he built cities and covered the Earth with concrete and steel.

And the meadows were gone.

And man said, "It is good."

On the second day, man looked upon the waters of the Earth.

And man said, "Let us put our wastes in the waters that the dirt

will be washed away."

And man did.

And the waters became polluted and foul in their smell.

And man said, "It is good."

On the third day, man looked upon the forests of the Earth

and saw they were beautiful.

And man said "Let us cut the timber for our homes and grind the wood

for our use."

And man did.

And the lands became barren and the trees were gone.

And man said, "It is good."

On the fourth day, man saw that animals were in abundance and ran

in the fields and played in the sun.

And man said, "Let us cage these animals for our amusement and kill

them for our sport."

And man did.

And there were no more animals on the face of the Earth.

And man said, "It is good."

On the fifth day, man breathed the air of the Earth.

And man said, "Let us dispose of our wastes into the air for the

winds shall blow them away."

And man did.

And the air became heavy with dust and choked and burned

And man said, "It is good."

On the sixth day, man saw himself; and seeing the many languages

and tongues, he feared and hated.

And man said, "Let us build great machines and destroy these lest

they destroy us."

And man built great machines and the Earth was fired with the

rage of great wars.

And man said, "It is good."

On the seventh day, man rested from his labors and the Earth was still,

for man no longer dwelt upon the earth.

And it was good.

## Population: Whose Baby?

(Reprinted from the "Population Bulletin," Vol. XVI, #1, February 1970)

Evidence is accumulating that if man does not make a quantum jump in the perception of his own self-interest, his very survival may be in peril.

A limited human population can, hopefully, learn to live peaceably with itself and with the fauna and flora of the earth in whose kinship all men have evolved. A continued increase, without letup, beyond our present massive population levels is masochistic and suicidal.

Consuming the earth's bounty at feverish rates, paying no heed to nature's balances and to the interdependence of all living things, is a formula for human extinction. That man is already consuming more than his share of nature's abundance is evident by the continuing and escalating extermination of hundreds of species of fauna and flora. That man is crowding and contaminating his environment to a point where the quality of his own existence and his enjoyment of life are rapidly deteriorating is self-evident on every hand.



## Student Union

## "The Deadly Affair"

To quote Judith Christ of the New York World Journal Tribune, "You will find 'The Deadly Affair' first rate entertainment--and adult thriller perfectly cast!" Wanda Hale, New York Daily News, says "I liked it better than 'The Spy Who Came In From The Cold.'" Such is the comment on Columbia's production of John LeCurry's thrilling novel. Academy Award winners Signoret and Schell give James Mason real support in his outstanding performance. Nominated for Best English Language Picture, Independent Film Importers and Distributors of America, James Mason nominated for Best Actor, Independent Film Importers and Distributors of America. With James Mason, Maximilian Schell, Simone Signoret, and Lynn Redgrave.

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## Coffee Chat "UMR Day"

Campus improvements will be the topic of the next coffee chat, April 27 at 3:30 P.M. in the Student Union. Questions will be answered by both the Chancellor and Dr. McFarland, Dean of the Graduate School and Chairman of the UMR Planning Committee.

Coffee, cake and coke will be served, high atop the ballroom in the Student Union in beautiful downtown Rolla.

May 16 has been designated as "UMR Day" at Busch Stadium by the St. Louis Cardinals Baseball Organization. Unique pre-game ceremonies, beginning at 12:30 P.M., will be held honoring UMR's 100th birthday. Chancellor Merl Baker will toss out the first ball beginning the Cardinals - Cubs contest.

Those wishing tickets should see their Student Council Representative, or send cash/check to:

Kathy Trexler, Centennial Events, UMR Library, Rolla, Missouri 65401.

## NOTICE!

Wesley Foundation, 403 West 8th Street will present the program "Bull Dozed America" (film) presented by Dr. Bobby Wixson on Wednesday, April 22 at 6:00 p.m. All interested students are welcome to attend.

SUPPORT THE MISSOURI MINER

## What's so special about Beechwood Ageing?

We must be bragging too much about Beechwood Ageing.

Because we're starting to get some flak about it. Like, "Beechwood, Beechwood... big deal." And "If Beechwood Ageing is so hot, why don't you tell everybody what it is?"

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First, it isn't big wooden casks that we age Budweiser in.

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let Budweiser ferment a second time. (Most brewers quit after one fermentation. We don't.)

These beechwood strips offer extra surface area for tiny yeast particles to cling to, helping clarify the beer. And since these strips are also porous, they help absorb beer's natural "edge," giving Budweiser its finished taste. Or in other words, "a taste, a smoothness and a drinkability you will find in no other beer at any price."

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THURS. FRI. SAT.  
April 23-25  
-RATED M-  
Alfred Hitchcock's  
"TOPAZ"  
Frederick Stafford & Dany Robin

SPECIAL SAT. MATINEE  
April 25  
For Entire Family - 2 p.m.  
"A DOG OF FLANDERS"

SUN. MON. TUES.  
April 26-28  
Sunday Continuous From  
1 p.m.  
-RATED M-  
"GAILY, GAILY"  
Beau Bridges & Brian Keith

WED. THURS. FRI. SAT.  
April 29-May 2  
-RATED M-  
"TAKE THE MONEY  
AND RUN"  
Woody Allen & Janet Margolin

## RITZ THEATRE

THURS. FRI. SAT.  
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No One Admitted Under 16  
Unless Accompanied By  
Parent  
-RATED R-  
"MY LOVER, MY SON"  
Romy Schneider &  
Donald Houston

SUN. MON. TUES.  
April 26-28  
"THE ODD COUPLE"  
Jack Lemmon &  
Walter Matthau

WED. THURS. FRI. SAT.  
April 29-May 2  
No One Admitted Under 16  
Unless Accompanied By  
Parent  
-RATED R-  
"THE LAWYER"  
Barry Newman &  
Diana Muldaur

## ROLLA DRIVE-IN

Shows Start At Dusk  
REOPENS SATURDAY  
April 25  
"MAROC 7"  
Gene Barry & Elsa Martinelli  
-PLUS-  
"DEATH OF A  
GUNFIGHTER"  
Richard Widmark &  
Lena Horne

SUN. MON. TUES.  
April 26-27  
"SPEEDWAY"  
Elvis Presley & Nancy Sinatra

TUESDAY, APRIL 28  
DOLLAR A CARLOAD  
-RATED M-  
"HANNIBAL BROOKS"  
Oliver Reed & Michael Pollard  
WED. THURS. APRIL 29-30  
No One Admitted Under 16  
Unless Accompanied By Parent  
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"BENJAMIN"  
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Catherine Deneuve

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# Flamenco Danced At Student Union

On Tuesday night April 14, Flamenco performed at the Student Union. They were a Spanish dancing couple accompanied by a guitarist. The dances kept the audience in awe since most had never witnessed this style of dance.

Every selection was danced to the quick and lively rhythm of Spanish music. During the dances, the couple kept the rhythm of the song by clapping hands, tapping feet, or playing cas-

sanets.

The costumes worn by the group were gaily colored and were changed for the different dances. The guitarist played solos of Spanish music while the couple changed outfits or the man would dance alone while the lady changed and visa-versa.

The most fascinating thing about the dances, however, was the movements. Each dance portrays a story and the story

is told through the movements. They speak in the dance through their eyes, hands, arms, etc. One specific example of the stories portrayed had the setting of a shoe repair shop. One pair of shoes he was working on were magical. When he put on the magical shoes, they made him dance. The other stories were harder to interpret but had something to do with love and life.

## Search for Solutions

(Continued from Page 1)  
which have been submitted and are awaiting approval and funding by various agencies. The requests total \$1,219,875.

With the current national concern over the deteriorating environment, we anticipate that a substantial number of these proposals will be funded.

Additional funds would enable the University to participate still further in this continuing search for solutions to environmental problems which plague us now and prospective ones which possibly could be prevented.

## More News & Views



Flamenco Dancers

## Miner of the Week



**The Missouri MINER**  
UNIVERSITY OF MISSOURI - ROLLA



SECOND FRONT PAGE

# Opera Brought To U.M.R.

The UMR Student Council General Lecture Committee and the Missouri State Council on the Arts presented The Opera

Theatre of Saint Louis in its production of "The Tales of Hoffman." The opera was presented at the Multi-Purpose

Building on April 16 at 7:30 p.m.

Edward Murphy, Artistic Director and Conductor, presen-

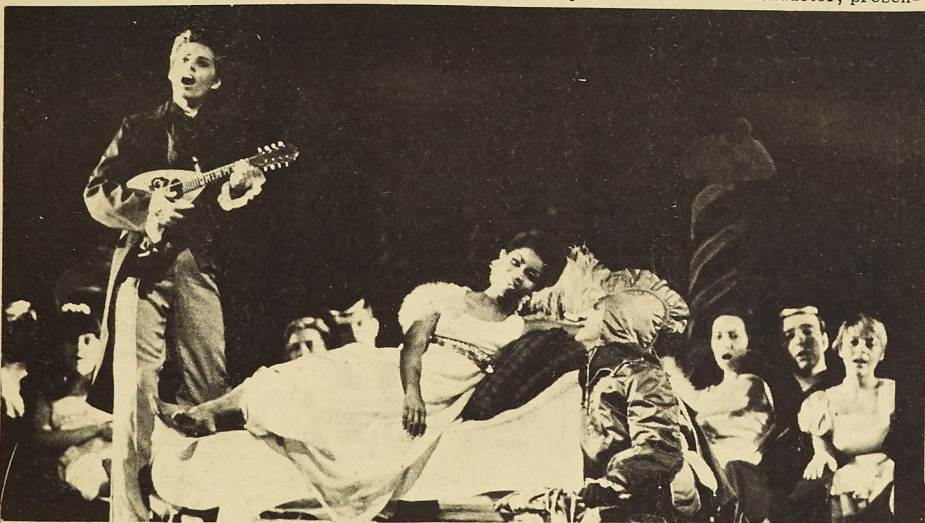
ted Jacques Offenbach's "The Tales of Hoffman", an opera in three acts. The opera was based on stories by E.T.A. Hoffman and the English text by Alfredo Valenti. The opera relates the tales of Hoffman, a poet, relating the man's strange relationship with the unfortunate ladies he loves.

Hoffman was played by William McDonald, whom in the first tale relates how he as a youth had fallen in love with Olympia, the daughter of Spalanzani. To Hoffman's dismay, he discovers that she is only

an automation of her father, the scientist.

The second story takes place several years later in Venice where Hoffman and Nicklausse, played by Christina Dougherty, have become frequent visitors of Guilietta, a rich courtesan for whom Hoffman has developed a violent passion for. Later, after a duel in which Schlemil, a rival for the love of Guilietta, is killed by Hoffman and a Gondola passes by the window with Guilietta in the arms of another lover. At last

(Continued on Page 6)



"Tales of Hoffman" Act III, Martin Schweig, St. Louis

## Jules Moch To Speak At U.M.R.

Jules Moch, French political leader, will speak to University of Missouri-Rolla students and faculty and interested public at 7:30 p.m. Thursday (April 30) in the Mechanical Engineering Auditorium. His topic will be "French Foreign Policy".

Moch was minister of the interior during the disturbance which resulted in de Gaulle's coming to power minister of economy, deputy premier and vice premier for defense.

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## Student Forum



### Complaints!

Dear Mr. Editor:

I have decided to leave the silent majority and become a minority. I wish to make known a few observations concerning UMR.

I am sure that we welcome the new form of the Missouri Miner. It is more comprehensive than ever before--containing more jokes and satire, and announcing more meetings than the editions of previous years. But where are the Editorial policies? Doesn't anything of substance happen on our campus that can arouse the editor's opinion and cause him to inform the students? Are the policies of the administration that clear and applied that impartially that no one gets caught in the gears? It seems that a few of the letter writers are doing the editor's job for him.

Have you taken a look at the campus, lately? All the new construction makes parts of the campus look like a frontier town, but this effect is temporary. I am referring to the paths where the grass is worn through to expose the dirt. I realize that engineers are more aware than others that the shortest distance between two points is a straight line, but must it be their credo? Why not stick to the sidewalks and have a green campus.

Have you tried to borrow books from the library and find that they are gone, week after week, and you must have them recalled. Graduate students and professors can borrow books for an entire semester, but the library doesn't bother to call them in at the semester's end. Those books sit on someone's shelves, forgotten and out of circulation. Why can't we have a policy where books can only be borrowed for two weeks and then renewed -- and this rule enforced.

What's wrong with the food service in the student union? The food just doesn't taste good. Why is it that you can go downtown to 'Carsons' for lunch and eat better prepared food in greater quantity than in the S.U. for the same

price? Our food service is operated only for the benefit of the students and need not show a profit. Why can't more care be taken in food preparation, and more variety be offered? What happened to 5¢ coffee that can still be found in the Hillcrest Drug Store?

I would like some answers.  
Michael Danielson

### Blood Drive

Dear Chancellor Baker:

I wish to express the sincere thanks of the personnel at Fort Leonard Wood for the blood donation made by members of the Men's Residence Halls Association on 25 February. This demonstration of good will and positive thinking on the part of a large number of your student goes a long way to dispel the concern of many regarding the activities and attitudes of today's youth. These young men not only felt that it was proper to support our youth in Vietnam, but chose to render that support in a tangible way. This service is characteristic of the mature attitude continually displayed by your students.

We here at Fort Leonard Wood understand the inconvenience and the disruption of academic schedules that were involved in your students' visit here. Additionally, there was at the time of their visit some concern expressed by the news media of an epidemic of meningitis existing here at the post. In spite of these problems, your students persisted in their announced intentions and in so doing not only fulfilled their original objective but demonstrated their understanding and confidence in our medical program here at Fort Leonard Wood.

I am writing separately a letter of thanks and appreciation to the Men's Residence Halls Association but wished you as Chancellor of the University to know of my feelings as well as those of the other personnel at Fort Wood.

With best wishes,

Sincerely,  
W. T. Bradley  
Major General, USA  
Commanding

## Student Council Shorts

### NEW CLASS SCHEDULES

The Fall 1971 Schedule of Classes will include the semesters when a course will be offered. For example, if a course is offered in the Spring but not in the Summer sessions, it will so state. It is also possible to get a class added if around 12 students wish it.

### SECOND B.S. DEGREE

The council sent a recommendation to the administration that a second Bachelors of Science degree be lowered from 40 hours to 32 hours.

### FUTURE FEE INCREASES

The administration realizes the mistake they made in failing to notify the students of the fee increase. If fees increase again, the students will be notified in advance.

### BOARD OF CURATORS MEETING

President Leone reported on the results of the Board of Curators meeting held on April 10. The first item pertaining to

UMR was the approval of bids on the new Math and Computer Science Building. A discussion was then held on the financial crisis confronting the University system. Because the tax bill was defeated, the University budget faces a substantial cut. The exact amount of this cut will not be determined until the budget is finally approved by the state legislature. It is estimated at close to a \$20 million deficit.

In order to cope with this financial crisis, the University could do several things. They could raise fees, cut down on communication, or curtail enrollment. These are only a few alternatives. However, it was expressed by the Board of Curators that they do not wish to curtail enrollment or raise fees.

The Student Council urges the students to write their state representatives and encourage them to vote for a budget that will not cripple our education system.

### NEW CHEMICAL ENGINEERING BUILDING

The new Chemical Engineering building took top priority on the new University Budget.

## Signs of the Times ....



## Individual Student's Responsibility Emphasized In New Course Offered

In the Schedule of Classes for Fall, 1970, a new course in statics (EM 49J) will be listed in addition to the regularly offered courses in statics bearing the number EM 50. The difference between EM 49J and the standard EM 50 courses in statics is in the teaching method, not in the material taught.

Students enrolled in EM 49J will be given a "Study Guide" and a "Reference Manual" which will contain a complete set of directions, "lectures," example problems, practice problems and solutions to all problems to enable the students to study statics at their own pace and according to their individual study habits. They will not be required to attend any class periods unless a test is scheduled. There will be four one hour exams plus the final. The final examination will be the same as that given to all EM 50 students.

This is not a shortcut to teaching. One teacher will be assigned for every 40 students enrolled in this course. At least one of these teachers will be available each day of the week to give individual help to those students who ask for it. The difference is that the student, not the teacher, decides if and when he needs help.

Dr. Karl Muhlbauer experimented with this type of instruction during the Fall Semester 1969 and again this semester. The results have been very encouraging and the students' response favorable. A course evaluation sheet which was submitted by the students in this type of class last semester showed that none of these students would have preferred the standard lecture method to this approach. About 50% of the responding students indicated, however, that they would like to have one formal lecture per week. Accordingly, one lecture will be given each week during a scheduled class period but attendance will be optional. If a student can get the material

all on his own, more power to him!

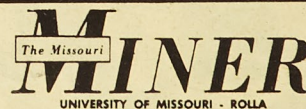
Dr. Muhlbauer's experience has been that there is very little correlation between the performance of individual students in this course and their overall grade point averages. Last semester (in one class of 40) 5 students whose overall grade point average was below 2.00 earned a grade of B or better in this statics course! Grade point average should, therefore, not be a criterion for advising a student to choose this course over the standard course in statics. The only criterion should be the student's maturity and willingness to participate in such a course.

The main reason for establishing this course is to instill in the student a sense of responsibility for his own progress and to get him to develop independent and mature

study habits. To be successful in his chosen profession an engineer must develop the confidence to continue his education without classroom lectures and the constant guidance of teachers. The sooner an engineering student realizes that it is possible to learn an entire course without class lectures the better for his professional career.

The enrollment in this course is limited to 120 students because of the high printing cost of the Reference Manual and the Study Guide which will be given to the students. A textbook will not be required for this course.

Anybody desiring more information concerning this course should contact Dr. Karl Muhlbauer, Dept. of Engineering Mechanics, Room 101 Old Met. Building, Phone 364-4049.



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The Indians' bats come alive in the nightcap and scalped the entire Miner mound corps. Don Franforth started the game and pitched three innings before the Indians scored two runs to knock him out. Mike Bradshaw came on in relief and in the fifth hung a curve ball that ended up over the left field fence off the bat of first sacker Tom Drury. Also making unsuccessful mound appearances for the Miners were Gib-

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Frisee continued his outstanding mound performance and allowed only three hits besides the fifth inning triple. Colombatto put the Miners into the lead in the seventh inning with a single to left with two out and runners on first and second. When the throw coming in from left got away from the third baseman, Biederman, who

The third story concerns Hoffman in Munich, where he is madly in love with Antonia, a frail. He later learns that

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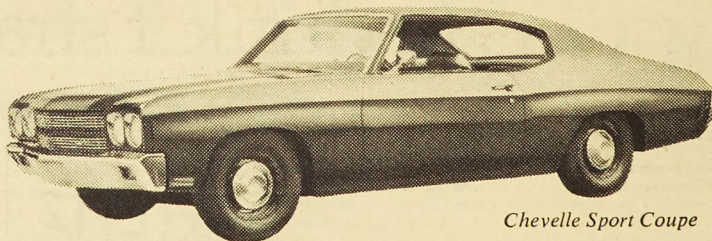
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# Black Ruggers Down Kansas City, 6-3; UMR Netmen Double Fault Undermanned Golds Drop 15-0 Contest Against Southwest, Wash. U.

By Jerry Davis

Saturday morning, April 11, the UMR Rugby Club drove to Kansas City to play two rugby games with the K. C. Rugby Club. The K.C. team is primarily composed of non-students in their twenties who are large and fast. Their team outweighed Rolla by over 800 pounds and featured a 295 pound fullback of the world champion K. C. Chief's Football taxi squad. UMR won the toss and gave K.C. the wind advantage in the first half. Rolla was kept under heavy pressure in the first half by K.C.'s superior size, but stubbornly defended goal with crushing tackles and lots of hustle countering the numerous K.C. drives. With a surge of power Rolla forced K.C. deep into their own territory and put them on the defensive in the last minutes of the first half.

In the second half Rolla had a stiff wind advantage and came on strong. The black's dominated play and kept the ball in K.C. territory until Keith Austin arched a lazy drop kick which hit the crossbar and bounced over. With Rolla 3 points ahead K.C. realized that they weren't playing a pushover team as they had thought before the game. K.C. mounted a desperate offensive, but could seldom move the ball out of their own territory. Joe Dunphy and Dave Erman each kicked several booming punts that kept K.C. on the run.

"Balls" Weiss caught a K.C. punt, was hit and passed to Jerry Davis, who eluded several K.C. players in a spectacular 50 yard run to score the key try (touchdown) for Rolla. The 2-point kick-after fell short but Rolla edged further ahead by a score of 6-0.

K.C. mounted several thrusting drives only to be stopped by Rolla's hard-hitting forwards and backs. Austin and Hanke made several outstanding tackles in key wing positions that shattered K.C.'s hopes. Rolla responded to K.C.'s attacks by a barrage of bonecrushing tackles that resulted in carrying two opposing players off of the field (A player may not be substituted during a game). On an

off-sides penalty, the K.C. kicker booted a bullet against the wind that split the uprights, making the score 6-3.

The black's weren't about to sit on their lead in the last eight minutes, as it was all K.C. could do to keep the Miners from scoring again.

Immediately afterward, the shorthanded Gold's put up a strong battle against K.C.'s second team which is composed of the same caliber players as the K.C. first team. Despite their inexperience, the Gold's played an outstanding game, but lost by a score of 15-0.

The Gold's squad is presently undermanned. All miners are welcome to come to practice at the intramural field at 4:30 every Tuesday, Wednesday, and Thursday.

By John Page

The Miner's Tennis team has played three regular matches, winning one and losing two, and one eight school match, coming in last. The eight school match was at Kirksville and included Kirksville, Bradley, Illinois State, Drake University, St. Ambrose, Parsons College, Iowa State and UMR.

On April 7 Southwest Missouri State took the match quickly by winning five of the six singles. Dick Herrin won the only singles for the Miners, with scores of 6-0, 4-6, and 6-3. Reynolds lost with scores of 2-6, 6-3 and 6-2. Mullens lost; 8-6 and 6-4. Varnon lost 6-4 and 6-4. Njus lost; 6-2 and 7-5. Weld lost; 6-3 and 6-4. Mullens and Herrin lost the first doubles 6-3 and 6-4, but UMR won the last two doubles.

Reynolds and Varnon won 10-8 and 8-6 and Njus and Weld won 6-1 and 6-4.

On April 16, Carter Njus won the only singles for UMR against Washington University with scores of 6-1, 2-6 and 6-4. Reynolds lost; scores 6-4, 4-6, and 14-12, Mullen lost; scores 3-6, 7-5, and 9-7, Varnon lost; scores 6-1 and 6-4 and Herrin lost; scores 8-6 and 6-3. UMR lost the two doubles.

## NOTICE!

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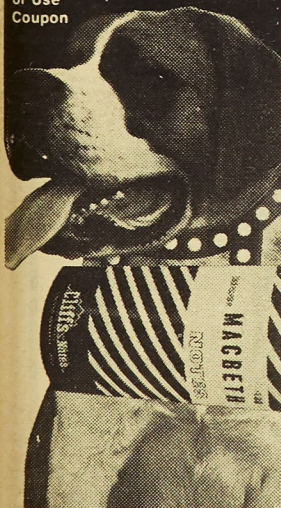
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## Soccer Club Kicks Off Season; Posts 0-1-1 Record Against Mizzou

By Billy Horsford

All student's are invited to the Kicker's away games: April 25 at Mizzou. The team would like to thank Mr. William Key, UMR athletic director, for the newly erected goal posts.

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