Farms make up half of the campus

The word "agricultural" long ago disappeared from Michigan State's name, but farms and farming remain a large part of the University - farm land, in fact, still occupies more than half of the 5,100 - acre campus.

Most of the University's population and buildings are confined to the some 2,000 acres of the main campus bisected by the Red Cedar River. But beginning at Mt. Hope Avenue, the University Farms stretch for more than 2½ miles south to just beyond the I-96 expressway, bounded on the east by Hagadorn Road and on the west by I-496. The close proximity of extensive land for research makes MSU "one of the most fortunate universities in the nation," notes Byron H. Good, superintendent of the University Farms and professor of animal husbandry.

Few schools can offer scientists the advantage of being just minutes from their research, he says. And with so much land being put to a variety of uses, MSU is one of the region's largest farmers.

THE UNIVERSITY'S livestock population totals more than 10,000, ranging from turkeys, chickens and mink to cattle, sheep and swine. They are housed on several research farms, including the swine research center on Forest Road, the dairy

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MSU News-Bulletin

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Law, nursing college proposals awaiting more study, money

Whatever happened to the idea of establishing a College of Nursing and a College of Law at Michigan State? While the former proposal is the newer one, it seems likely that action may come first on the College of Nursing suggestion, while the proposed law school remains caught in the mire of legislative - educational funding channels.

The University administration received the official proposal to establish a College of Nursing last September. It was forwarded by the provost to the Administrative Group (all University deans and vice presidents) for study, and Robert D. Schuetz, acting director of the Institute of Biology and Medicine, was placed in charge.

Study continued throughout the past school year, eating off during summer months, and Schuetz said that it will be taken up again when classes resume in September. He expects the study phase to be completed during the fall so recommendations can be made to the provost's office before the end of fall term.

Representatives of the School of Nursing, the provost's office and the Office of Institutional Research have been involved in the Administrative Group's study sessions, Schuetz said. "We've been looking at the objectives of the school and trying to discover what program of nursing will fulfill these objectives," Schuetz said. "Once that is decided, the matter of whether nursing forms a department, a school or a college will work itself out in the administrative structure of the University."

Schuetz emphasized the Administrative Group's efforts to study the nursing proposal within the larger context of all the University's medical program, looking at nursing as it relates all of health education at MSU.

The School of Nursing is currently a part of the College of Natural Science.

IN THE CASE of establishing a College of Law, the University has been bandying suggestions with the

(Continued on page 6)

Helping students grade the faculty

There's a day of reckoning at the end of each quarter when students have a chance to "test out" with the prof who's been badgering them all term with talk, tests and term papers.

That's the day when the student instructional rating forms are passed out, and the beleaguered scholar finally gets his say about how good or how bad the course was. Cause for professorial panic? Do beads of perspiration suddenly form on the brow of the faculty member as he

Other evaluations developed. See page 3.

approaches each row, smiling weakly, with forms and scoring pencils in hand? Not very likely.

Some faculty view the evaluation form as a pain in the neck, some see it as a necessary evil, and others welcome the chance to obtain some kind of measure of their teaching effectiveness. If they realized the time and effort that went into designing and updating the forms, tabulating the data and consulting with instructors about the findings, perhaps there would be even less criticism.

* * *

ALTHOUGH THE UNIVERSITY initiated instructional evaluation in the late 1940s, the current system is the product of a two-year, 10-step development program that involved both faculty members and students, spanning the various academic disciplines.

The development steps began in summer, 1967, when interviews were conducted to elicit faculty and student ideas of what questions and responses would be the most valuable in evaluating and upgrading the standards of instruction at MSU. Then began the lengthy step-by-step analysis of items to be included, the preliminary forms, evaluations, revisions, the writing of the final report and manual, and -- finally -- setting up a system of feedback.

The result of the process was a four-part Student Instructional Rating System (SIRS) which has as its central objective "the utilization of student reactions for self-examination and self-improvement on the part of the instructor."

The first part of the system, and the only part normally seen by the student, is the instructional rating form itself.

* * *

THE SECOND PART of the system, the computer printout of form results, is more significant to individual faculty members. In the printout the instructor can see the tabulation of his class's opinion of his teaching,
College of Education receives high marks from national group

The College of Education, particularly its teacher education programs, continues to meet high standards, according to a recent review by the National Council for Accrediting Teacher Education (NCATE).

"Team members analyzing the college's strengths and weaknesses said that "MSU, despite the size and complexity of its operation, seems to have achieved an overall uniformity that bodes good for the future of its operation in teacher education."

A creditable team members last visited here in 1961. This year 12 leading educators from throughout the country again visited MSU and issued their evaluations.

In the summary report they stated that "the college's capacity for innovation and experimentation, and its stress on the individual are captured in several of its programs."

Three programs include: "A new student teaching model in which students are assigned to public schools in clusters of 10 to 12 student teachers per building; internship student teaching in elementary schools; and the constant revision of Education 200 (Individual and the School) and Education 450 (School and Society) in order to make these courses viable inputs in the training of teachers."

In reviewing graduate programs, the accrediting team praised the one offered in counseling, personnel services and educational psychology as "one of the most thorough and at the same time creative and innovative curricular programs developed in teacher education in the country."

The report did recommend greater use of research and teaching assistants in order to increase faculty participation in research and writing, and it suggested a systematic follow-up evaluation of graduates. It also recommended that greater time be devoted to secondary education.

NCATE team members observed that "the College of Education does have avenues for long-range planning but it does not appear too well organized or coordinated."

"This is not peculiar to MSU. The college is aware of this and there are signs of intent to do something about it in the future."

-Barbara McIntosh

Disaster has befallen science, a Columbia University biochemist has warned.

In recent speeches, including one earlier this year at a seminar arranged by MSU's biology department, students, Erwin Chargaff has referred to a "new feeling," present even among science students, that could prove disastrous. "Science is a beautiful enterprise," Chargaff, Austrian born, earned the Ph.D. in chemistry at the University of Vienna in 1928.

Scientists used to work under poverty conditions, he said. Then, science was a noble enterprise. "Most of the revolution in science is actually a revulsion against the enterprise," he asked.

"Science which began as a sincere and profound investigation of nature has been turned into an assault on nature carried out by what has been essentially imperialistic forces of the intellect."

After the atom bomb had been employed, many heroes - scientists - physicists turned over their spiritual pockets to show that nothing impure was hidden there.

"...The first eugenicists in Germany were far from Nazis. They were great geneticists. But the first extermination camps that were erected on German soil were for the extermination of insane or otherwise genetically incurable people. And what look at us into."

MORE SCARE TALK?

Not necessarily. Canadians were in the news recently with attempts to strike out a law put into their books in the 1930s as a result of those eugenicists in Germany. Already, several innocent Canadians have been sterilized.

... These Canadian laws, said the Genetics Society of Canada, "were designed to prevent the reproduction of individuals with mental retardation and mental deficiency by compulsory sterilization. In most instances, no human geneticists were consulted in the formulation and execution of these Eugenics Acts. In fact, these Acts have little scientific validity either in their genetic basis or in the anticipated population or social returns."

-Phillip E. Miller

University radio programs to be broadcast nationally

A new radio series from Michigan State made its debut last week on the Mutual Radio Network. "Twenty-Two from MSU" presents 22 minutes of ideas and events. Hosted by Maurice Crane, professor of humanities, the show is a public service offering of Mutual to its more than 500 affiliates.

Mutual Radio network affiliates in Michigan include: WLEN, Adrian; WAAM, Ann Arbor; WCMZ, Battle Creek; WCAR, Detroit; WMRF, Flint; WSHN, Fremont; WPJP, Grand Rapids; WHTC, Holland; WKRM, Jackson; WTVY, Kalamauro, WRRB, Mt. Clemens; WCM, Mt. Pleasant; WMUS and WMUS-FM, Muskegon; WNUL and WNUL-FM, Niles; WZOS, Tawas City; and WLKM, Three Rivers.

University of the Air, set this fall

Either may be taken for or without University credit.

The urban politics course will spotlight the role of blacks and other minorities, the effect of the suburbs ring around the cities and the importance of schools and school laws in community conflicts. It will discuss these matters against a backdrop of the political structure of cities, the political behavior of officials and interesting organizational arrangements.

America's mythological heritage from Greece and Rome will be explored in the classical mythology course.

The courses, a journey through the myths and legends which are background for much of literature, music and art will carry the student from the mythological creation of the universe through the rise of gods and the great heroic legends which were once part of every lad's education.

Information on registration, credit, fees, location and times may be obtained from the University of the Air, 12 Kellogg Center, telephone 355-6326.
Grading faculty . . .

(Concluded from page 1)

The SIRS manual, the third section of the program, explains the components of the system, and a description of procedures used in developing the program in the fourth part.

Willard G. Warrington, director of the Department of Evaluation Services, emphasizes the totality of the four-part program and the importance of the second (evaluation) step in making the forms truly meaningful for the faculty member.

"A professor may look over the forms before they are scored in order to get some kind of idea of how his class felt about the course as he was teaching it, but often it's the consultation session available after the form has been processed that aids the instructor in evaluating and then improving his teaching," Warrington said.

On certain days at the end of the term, some 40,000 to 50,000 student evaluation forms are delivered at the data processing center for scoring and tabulation. The results are confidential and can be picked up by the faculty member at Evaluation Services. It is then left up to the instructor as to how he or she will use the results. One option is to consult one of the Evaluation Services specialists about consulting on the data and interpreting it as it relates to the all-University norms of teaching.

Warrington is frank in admitting that opinion on SIRS varies among University faculty.

"While some faculty members believe that the forms provide an excellent way to upgrade their teaching effectiveness, others criticize the program as being too standardized, too general or not 'significant' for the course they are teaching. Consequently, some departments have developed their own forms of course evaluation." (See related story.)

THE SIRS PROGRAM is the one most widely used across the University, however, with some 5,269 classes being administered the forms during the 1970-71 school year.

By action of the Academic Council at its Dec. 2, 1969 meeting, "each of the teaching faculty (including graduate assistants) at Michigan State University regardless of rank or tenure is required to use the Student Instructional Rating Report to evaluate (a) at least one course in every quarter in which he teaches and (2) every separate course he teaches at least once a year." Warrington hopes that within the next academic year there will be four forms available which will conform with the variety of instructional settings at MSU - large lectures, general-sized classes (30 to 60 students), small seminars and laboratory sections.

"The separate forms plus spaces for individualized questions should help make the evaluating forms both specific and significant enough for most faculty members," Warrington said.

-RITA RICE

Some departments design specialized rating forms

Faculty members and graduate assistants in the Departments of Political Science and Chemistry have also experimented with alternative methods of obtaining student comment on their teaching methods - questionnaires specially designed for their subject areas.

The political science and chemistry forms are alike in origin and style. They were designed because undergraduates and/or instructors wanted precise kinds of information not available in responses to the SIRS form. They consist primarily of objective questions, but essays are encouraged. Here the similarities end.

The political science evaluation is a brief (five questions) one-page form designed to elicit students' opinions which could be easily read and used as a handy reference guide for other students.

Contrasting with the political science questionnaire is the more complex chemistry evaluation program which includes three forms on which to be administered by the class lecturer, one by the recitation instructor and one by the lab instructor, since the three are usually different. The number of questions on the forms ranges from 22 to 25.

Responses of the chemistry questionaires are made available only to the individual faculty member or graduate assistant and to the chairman of the department.

Susan Lawther, instructor of political science and the department's undergraduate advisor, worked with the Student Undergraduate Advisory Committee to design the questionnaire which has been used for the past three years.

"THE STUDENTS WANTED information that would be valuable for the student to know before signing up for a certain course or instructor," Lawther said.

Consequently, the form contains questions with responses that are easy to report in summary form. For example, students are asked to grade both the course and the teacher on the 4.5 to 0.0 scale. The results are tabulated and kept on file in Lawther's office.

Chemistry's Graduate Student Teaching Committee, chaired by graduate assistant Eugene N. Losey, provided the impetus for designing the three-three form evaluation system.

"The University form just didn't get to the crux of the way chemistry is taught," said Losey, "so we tailored three separate forms designed specifically for this department's lecture, recitation and lab classes.

Losey admits that chemistry students may grow somewhat weary of completing three different forms for one course, but he emphasizes the individuality of each setting and the division labor in explaining why the three forms are necessary.
Up and down the organization

Nearly five months after its formation, the 12-member committee studying the University's administrative-professional classification system is preparing to report its findings to the Administrative-Professional Association.

And while that report is likely to suggest changes in the A - P classification system, committee chairman J. Henry Backus noted that his group hopes to affect change through reason and persuasion rather than by "blowing the lid off" the present system.

Backus, an employment specialist in the Personnel Center, acknowledged that the committee anticipates "hesitation and reluctance" on the part of the administration to the idea of introducing "radical changes" that would disturb the present method of doing things.

"It will require considerable courage, strength and power to bring about immediate changes in the present classification systems," Backus said in a recent report on the group's progress. "The committee expressed the feeling that bringing about these changes in the system can only be accomplished through long, patient, and careful consideration of the immediate needs and the persuasion of individual members of the administration."

Newly elected faculty to join Academic Council this fall

Thirty - three newly chosen faculty members will take seats on the Academic Council beginning this fall. The Council's new makeup - also including the largest proportion of female voting student representatives - includes 66 elected faculty members, 19 appointed members, 52 student representatives and 19 ex officio members (12 of whom are chairmen of standing committees).

Newly elected to the Council are ("R" denotes those reelected): Agriculture and natural resources - Richard W. Chase, John N. Ferris, Harold D. Hafs (R), William T. Magee, Richard Pfister (fills term of James Bonnen); arts and letters - Thomas H. Breslin, Herbert C. Jackson, James H. Pickering, Frederick D. Williams; business - William D. Lazer, Hendrik Zwarensten (R); communication arts - Patricia Walsh; education - Charles V. Mange, Herbert C. Rodman; engineering - Thomas W. Culpepper, Donald J. Montgomery; human ecology - Joanne Euler; human medicine - Daniel F. Cowan (R); natural science - William C. Deal, Henry A. Imshaug (R), C. Deal, Henry A. Imshaug (R), natural science - Charles W. Worthington (R); veterinary medicine - Charles H. Cunningham; noncollege faculty - John E. Dietrich (fills term of Jack Britt; steering committee - James T. Bonnen, Walter F. Johnson (R), Beatrice Pauchec.

The present classification study was launched last March after a survey of the A - P Association's membership showed strong support for a review of the system (Faculty News, Feb. 2, 1971)."A - P president William D. Kenney said that the study was needed to see if the system could be modernized, and he noted that there were many indications of inequities and irregularities in classifications.

The committee has found some job titles that span the whole range (A - P through A - P 10) of classifications.

There are, for example, nearly 50 administrative assistants on the campus, and as of last April they were found in every rank except A - P 9. The same across - the - board distribution exists for persons holding the titles of director, manager, and editor. The committee has also found that 28 directors, 33 managers and 13 editors are in the A - P 1 through A - P 5 levels, while 16 assistant directors, one assistant manager and two associate editors hold ranks of A - P 6 or higher.

Such apparent inconsistencies can lead to both confusion and discontent among the University's some 600 A - P employees, Backus said. And he said the study has raised several other questions, such as: Should titles represent specific levels in the structure (i.e., directors in A - P 9 and 10; associate directors in A - P 6 - 8; assistant directors in A - P 1 - 5)? Should a college degree be used as a criterion for an A - P job? Is it desirable to maintain "high - sounding" titles in lower A - P levels?

The classification committee's next meeting is set for Aug. 24. Backus said his group hopes to make its report to the A - P Association's executive group early in the fall.

Trying to chart MSU

One of the immediate tasks facing the administrative - professional classification committee is to create something that does not now exist - a set of all - inclusive organization charts for the University.

"We need to know what our organization looks like, before we can really get at any changes in the classification system," said J. Henry Backus, chairman of the classification committee.

He noted that while most successful corporations have detailed organization charts to show their structure, there are apparently no such large universities with such charts. MSU for example has no charts that reveal the University's complete organizational makeup to show the levels and relationships of A - P employees with other faculty and staff.

Backus said that a properly designed chart would reveal "a balanced or unbalanced organization, and will show whether appropriate positions are provided at each level of the classification structure for planning, coordination and control."

But he cautioned that any organization chart is simply "a snapshot of the organization at a particular moment," and needs to undergo continuing review. Such a chart can become quickly outdated because changes occur rapidly in large organizations, he added.

The committee is drawing up an organization chart, and the chart will be submitted along with its report on the A - P classification system.

Guess who's coming...?

Some 2,000 young band musicians from 21 Michigan high schools will be invading the campus in three separate weeks - long clinics Aug. 16 - Sept. 4. Practitioners will be supervised by individual band directors, with special counsel from Kenneth Blooomquist, director, and Dave Catron, assistant director of bands at MSU. Performances will be given each Saturday at 10 a.m. at Old College Field.
Study continues on rock music effects

Time was when rock and roll music fans were chided: "Stop listening to that loud music; it will ruin your hearing."

That charge now seems to have been largely an emotional reaction, unsupported by scientific evidence. Research since 1967 has raised serious questions with the criticism, and public opinion on the topic of rock music and its effects on hearing is gradually being tempered.

Michigan State has been a national and world leader in this type of research. Five studies have been completed in the past four years and a sixth is now in progress.

According to William F. Rintelmann, professor of audiology and speech sciences, there's no clear-cut evidence that rock and roll has damaging effects on the auditory system. In fact, some of the studies at MSU suggest that both musicians and their audiences can experience rock and roll for long periods of time with no significant changes in hearing.

Published statements on the initial findings are now accepted by some authorities, whereas first public mention of the conclusions was met with disbelief.

"WHEN OUR RESEARCH first received national publicity in the fall of 1968, we had many letters from people who were skeptical about our findings and conclusions," Rintelmann says.

"But now that other investigators have analyzed our data and performed similar experiments of their own, our findings are beginning to receive more support from the scientific community."

The purpose of the MSU studies has been two-fold: To discover the normal volume "loudness" range of rock and roll music, and to analyze any effects of the music on hearing.

The entire first study (1967-68) was devoted to ascertaining the loudness level of live rock and roll music. The range was discovered to be between 102 and 112 decibels (the average was 105) - quite different from the 120+ plus levels which were being erroneously reported in some of the national media, Rintelmann notes.

THE SECOND STUDY focused on musicians' hearing, and auditory disorders within the test group were of no greater incidence than those in the general population, 5% of the total.

The third and fourth studies utilized the temporary threshold shift (TTS) concept of audiology research which compares hearing levels before and after a person's hearing has been subjected to amounts of noise - musical or otherwise.

The fifth study was conducted during the past academic year and compared the hearing levels of frequent and infrequent rock listeners. No appreciable differences were found between the hearing levels of the two groups.

In the study currently underway, Rintelmann and associates are retesting the hearing of the musicians of the earlier (second) study after an interval of three years. The concept of retesting is crucial to making definite, valid conclusions on the data that has been collected, he says.

"Our tests so far have yielded no evidence that rock and roll music is hazardous to the auditory system, but only continual retesting over a period of years will indicate whether there are subtle differences that went undetected or might develop later."

INQUIRIES ABOUT the rock and roll research at Michigan State have come from all over the world, including such faraway places as Czechoslovakia, Malaysia and Israel.

Rintelmann stresses the importance of the research and its application to the present and future life styles of young people.

"Rock and roll music is no longer a small phenomenon; it's a large part of the recreation enjoyed by youth of today, and I believe it's essential for scientists to discover and to reveal to the public whether it has harmful effects or not."

In particular, parents of rock fans may be interested in the research being conducted.

"Keeping parents informed will prevent them from being unduly concerned about the music their children are listening to. They should know that there may be a minor risk to auditory damage, but that the younger generation are not doomed to deafness as is sometimes erroneously stated."

RITA RICE

Wilson Foundation suspends 1971-1972 awards competition

This year's competition for first-year fellowships awarded by the Woodrow Wilson Foundation will not be held.

Foundation director H. Ronald Rouse said that the program is being suspended temporarily because trustees of the Wilson Foundation "believe that prospects of securing funds for the support of a significant number of first-year graduate students in 1972-73 are too uncertain."

He said that the 3-5 winners of the last competition will be supported in graduate schools during the 1971-72 academic year. That total includes four students from MSU.

Rouse said that the foundation plans to use the period of temporary suspension to design a new program of fellowships to be held in 1973-74.
Crop scientist details effort to develop a 'super-grain'

A major revolution is taking place within the cells of one of nature's most important cereals, says a Michigan State crop and soil chemist writing in the August issue of Scientific American.

D. D. Harpstead, professor and chairman of soil and crop science, describes a "super-grain" in the making. It is called high-lysine corn.

The high-lysine development began in 1963 with the work of Purdue University scientists led by Edwin T. Mertz.

"Lysine is normally woefully deficient in corn," says Harpstead. "The amino acid is essential to life for humans and animals with only one stomach, because it is one which cannot be made by the body. In some animals with more than one stomach, such as the cow, bacteria make the lysine." * * *

The Mertz team developed a corn strain that increased lysine content by 69 per cent.

By 1967, the nation of Colombia was ready for large-scale testing of high-lysine corn. Harpstead led a team of plant breeders, animal nutritionists, medical doctors, grain millers and government officials in testing the corn.

He notes "the real contribution of high-lysine corn will come when it reaches the masses of people in the marketplace, in the fields and in the gardens." * * *

Although it was effective in helping malnourished children in Colombia, he said, the overall objective of high-lysine corn development is to make it available as part of the normal diet in homes.

Carter career: Football to music

Fourteen years ago Warrick Carter decided to abandon his budding musical talents for a member of his high school band to compete in the more rigorous world of football.

As he spent most of the season on the bench, Carter then a ninth grader, finally made his debut and distinguished himself by promptly getting knocked cold.

Today Warrick Livingston Carter combines his athletic and musical activities to a few rounds of tennis and uses his musical abilities, which he developed with renewed interest after his football exploits, to conduct two summer seminars in the music department.

A 1970 MSU graduate, he earned a Ph.D. in music education, specializing in urban education and percussion. He is currently a visiting instructor in music here.

Carter's classes this summer are young music, a course for high school musicians from throughout the country, and a workshop on urban music education.

* * *

In addition to his teaching, Carter performs with a five-man lecture-concert combo called "The Black Ph.D.s." All the members are Most did not earn their degrees in music, but they represent diverse fields.

"Our name is to show that no matter what blacks do, in what area, they have a common thing in music," Carter said.

Carter, a member of a large number of groups, says that the black community can come together to perform in such places as Federal City College in Washington, D.C., in Ohio and Illinois, and at the University of Miami. The only other MSU member is Leslie Rout, associate professor of history.

* * *

Carter began his musical career by playing the drums in the fourth grade.

After earning his bachelor of arts degree from MSU because, he said, "I knew the music department had graduated black Ph.D.s."

Many universities have discouraged black doctoral candidates, he said.

Carter has been a staff member at the University of Maryland-Eastern Shore Branch since 1965, where he is director of bands and music education. He also writes and arranges music and has had work performed by Mercer Ellington, among others.

As he sits amidst a conglomeration of instruments, Carter's wiry frame, receding Afro hair style and languid air make him the last of the Congo drummers, but hit jazz drummer. But the stereotype is broken by an amused expression that frequently comes to his face and an alert conversational tone which affirms his confidence in his own knowledge of music.

Carter theorizes that black music has often forecast black politics.

"Black musicians have always been inventive in an art genre," he said. He lists John Coltrane, Miles Davis and Sun Ra among black musicians who have played musical trends which have had corresponding political trends.

"Coltrane's lead in black nationalism in the late 1950s, and the radicalism Sun Ra and others are shown, indicates an increased spirit of black radicalism in the future," Carter said.

-RITA RICE

Overseeing the University Farms...

(Concluded from page 1)

research center on College Road, the beef cattle research center on Beaumont and Bennett Roads, and the poultry research area on Jolly Road.

In addition, there is a horse research center, testimony in part to that animal's resurgence in popularity. And there are accommodations for imported pigmy goats, Tasmanian wallabies and other not-so-usual livestock.

Farm animals constitute one of the University's major attractions for visitors, Good notes. In addition to the thousands who tour the farms at the annual small animals day in May, he says, school buses in "a continuous flow" converge on the farms during each spring.

Although farms' personnel take pains to accommodate all visitors— even those who arrive unannounced— Good says that precautions have to be taken to insure that research projects are not disturbed by curious onlookers. And as the human population increases in the area, he adds, the rate of vandalism on the farms has risen.

While MSU's farms are dedicated to providing knowledge and not to a stream of profits, some of the farm products are marketed commercially, particularly beef, swine, milk, poultry and eggs.

In plant science, the farms provide research and testing in such areas as crop and soil sciences, botany and plant pathology, horticulture and entomology.

A variety of crops is grown, including, for example, the prominent stand of corn along Mt. Hope between Hagadorn and Farm Lane. Further south, grains and ornamental plants are under study on large fields and on small experimental plots. They range from crops for which Michigan is noted, such as beans and cherries, to an occasional study of one not so common, like tobacco.

The job of maintaining the farms lies with a staff of about 75 permanent employees, whose numbers grow to about 250 when the list of chores increases during summer.

About 15 students have rooms and jobs in the sheep, beef, poultry and swine research facilities, where they help provide protective services and some animal care.

Dr. Carter, who joined MSU in 1941, has been superintendent of the farms since 1950. His own particular interest is horses, and he has twice been called on to travel overseas and inspect Arabian horses.

-GENE RIEFTERS
Faculty art exhibit

Eleven MSU artists now have their creative works on display at the Kresge Art Center. The faculty exhibition, continuing into September, is supplemented by items from the permanent collection.

Faculty members exhibiting paintings include Tony De Blasi, Allen Leepa, Cliff McChesney, Jens Plum, Nan Stackhouse and Irv Taran. William Gamble will also have paintings and original drawings on display. Drawings by James Fagan will be included and photography by Roger Funk. Louis Raynor will have a stone-ware exhibition, and James McConnell will have serigraphs and three-dimensional "things."

Gallery hours are 9 a.m. to noon and 1 to 5 p.m. Monday through Friday; 7 to 9 p.m. Tuesday, and 2 to 5 p.m. Saturday and Sunday.

The oldest instructor at MSU's National Summer Gymnastics Clinic is Charles DuBois, 68, of Kingston, Tenn. A retired construction engineer and 1926 Big Ten champion on the parallel bars for Purdue, DuBois now coaches gymnastics at Oak Ridge High School.

It is possible to see skaters perform under show conditions the remaining two Saturday evenings of the institute (August 14 and 21) from 8 p.m. to 9 p.m. at the ice arena, free of charge.

Chivalry on the wane

Is man a great protector of woman? A team of MSU researchers has found that if the age of chivalry isn't dead, it lacks some of its former luster.

Psychologists Gary E. Stollak, Lawrence A. Meze and Gerald L. Borofsky wanted to know how sex role affected the propensity of a bystander to come to the aid of an attack victim.

So they hired a group of drama students, allegedly to perform a psychodrama before members of a psychology class, but actually to feign a fight before two unsuspecting students while researchers watched from behind a one-way mirror to see if the bystanders intervened.

In each altercation, while as far as the students knew was unstaged, one participant was obviously beating up the other. The action was so real that one actress was removed to the health center for treatment of cracked ribs.

The mock fight was staged 42 times, and the sex of the actors and bystanders was the only independent variable. Each fight involved one of four outcomes: a man beating up another man, a woman beating another woman, a man beating up a woman, and a woman beating up a man.

The researchers hypothesized that male bystanders more often than female witnesses, would step in to help a victim, and they were right. But the psychologists also expected the greatest percentage of intervention would be when a man saw another man beating up a woman. They were wrong.

In fact, in six fights involving a male aggressor and female victim, not once did a male bystander intervene. They stood aside when their gallantry was put to its severest test.

The scientists are reluctant to give reasons for the unusual results. They said there could be a vicarious gratification out of watching another man beat a woman, or perhaps the uniqueness of the situation kept the men from intervening. However, the researchers concluded that the definitive answer awaited further research.

Skaters keep cool despite the heat

Amid the sweltering days of July and August, activities such as picnics, swimming and golf come to mind. But for 16 hours a day, ice skating is the primary activity for participants in MSU's 23rd Summer Skating School.

More than 120 young figure skaters each week gather in the ice arena for one to eight weeks of work in perfecting their ice technique.

The skaters congregate from all over the Midwest to work out on the ice for six or eight hours a day—often starting as early as 5:45 a.m.

"Most kids don't get too much ice time during the winter, with school and all," noted Red Bainbridge, ice arena manager.

"During the summer sessions, one day of skating can yield the equivalent of a week's worth of wintertime progress. It's getting so some skaters work for real progress in technique during the summer and use the winter to maintain their level of proficiency."

The students practice under the tutelage of five professional instructors, including a Midwest champion, a member of the U.S. World Team and an Italian world-class skater.

School participants range in age from four years old to teenage skaters.

According to Bainbridge, some of the young skaters stand a chance of developing into world-class figure skaters—progressing in the footsteps of such world stars as Gary Visconti and Carol Heiss, both of whom attended the MSU school in the past.

In addition, with the recent rise in popularity of both figure and hockey skating, a greater number of teenagers are attending both the figure skating school and a hockey program, which was run earlier in the summer.

"It used to be that the only teenagers attending the figure skating sessions were the real dedicated amateur skaters," Bainbridge said. "But recently we've had a lot of kids who just got interested in skating and attended to improve their form."
Friday, August 13, 1971
8 p.m. Planetarium Program—"Destination Mars" unveils the history, mystery and science of Mars. Included will be an explanation of the Mariner program and the journey of the Mariner 9, scheduled to be near Mars in November. Orson Welles' "War of the Worlds" will follow the 8 p.m. showings. Abrams.

8:15 p.m. Lecture-Concert Series—"The World of Gilbert and Sullivan" will be highlighted by six alumni of the D'Oyly Carte Opera Company, the American touring company of England's Gilbert and Sullivan for All, Ltd. in London. Tickets, $2.50, are available at the Union Ticket Office or at the door. Fairchild Theatre.

Saturday, August 14, 1971
2:30 p.m. Planetarium Program (see Aug. 13). Abrams.

7:30 p.m. 30 Film Festival—"Shipmates Forever" and "Ready, Willing and Able" feature Ruby Keeler, Dick Powell, Allen Jenkins and Jane Wyman in leading roles. Tickets, $1, available at the door. 108B Wells Hall.

8 p.m. Exhibition figure skating (see story pg. 7). Ice Arena.

8 p.m. Planetarium Program (see Aug. 13). Abrams.

Sunday, August 15, 1971
4 p.m. Planetarium Program (see Aug. 13). Abrams.

BULLETINS

BOARD MATERIAL DUE The next meeting of the Board of Trustees will be held Thursday, Sept. 9. Items to be included in the agenda must be submitted to the Executive Vice President's Office or the Provost's Office by 5 p.m. Thursday, Aug. 19. Material received after that date will be held for the November meeting.

FINAL GRADES Grade Cards will be delivered to departmental offices on Aug. 23 for basic courses, and for all other courses on Aug. 26. The cards should be checked immediately to determine if there is a card for each student. The University's grading systems are printed on the face of each grade card. More detailed information is given on pages 112-116 of the 1971 Summer Term Schedule of Courses and Academic Handbook. Final grades are due in the Office of the Registrar, 150 Hannah Administration Bldg., (tel. 5-9596) 36 hours after final examinations are given.

EXHIBITIONS

Campus Plantings Specimen Sourwood tree is in full bloom east of Auditorium section of Wells Hall.

CONFERENCES

Aug. 15-27 Management & Communications V, U.I.
Aug. 16-Sept. 4 Marching Band Clinic. Dorm.
Aug. 22-Sept. 1 Local Manpower Programs & Delivery Systems

SEMINARS

THURSDAY, AUGUST 19, 1971

FRIDAY, AUGUST 20, 1971
Normal birth following exteriorization and intravenous injection of the 40 day old sheep fetus. A. K. Karihaloo, Dept. of Zoology, U. of Alberta. 4 p.m., A149 Veterinary Clinic. Center for Lab. Animal Resources.

Information on MSU events may be submitted, for possible inclusion in the bulletins, to Sue Smith, Dept. of Information Services, 109 Agriculture Hall, (313) 353-8819. Deadline for submitting information is 5 p.m. Tuesday preceding the Thursday publication. The calendar of events will cover an 8-day period, Friday through Saturday. During the summer the calendar will cover a two-week period.