America's amber waves of grain are the hope of the world's poor and starving. Millions of lives depend on the size and quality of America's harvests, but a bountiful crop depends on the weather.

James D. McQuigg, MS '60, PhD '64, is director of a new Center for Climatic and Environmental Assessment. It opened in Columbia in late November and is the only one of its kind in the United States.

McQuigg and other scientists hope to be able to monitor such problems as the African drought and weather patterns leading to the Russian wheat shortage. As another Missourian was supposed to have said, nobody can do anything about the weather. But if government officials know what is going to happen, maybe they can do something to alleviate the bad effects and maximize the good.

Forecasting the climate for the next decade is "one of the hardest scientific problems today," McQuigg says. Starting with the Great Plains wheat belt, his staff will put together information on past crop yields, weather and soil conditions. From this data, they will develop mathematical models allowing them to input daily information on the weather.

As the growing season progresses, scientists at the center will be able to assess the impact of weather on the crop. Eventually the center will monitor the climate and its effect on crops throughout the world.

McQuigg and his staff will keep government officials briefed. Hopefully, officials can make more informed decisions on how much grain can be sold, where it will go, and even if the United States can spare any grain at all.

In this way, the center "will have input

into top management decisions" about America's grain policy, says Norton Strommen, a supervising meteorologist under McQuigg.

World grain reserves are down to an estimated 27-day supply, the lowest in decades. Most of this represents North American grain.

"Since the sixties, there has been a run of years exceptionally good for food production in the Midwest," says Wayne Decker, chairman of the atmospheric science department on Campus. "We have learned to farm using that good weather, but it can't last forever."

Right now, McQuigg is working to make the center, a unit of the Environmental Data Service, the focal point of information on the weather's impact on the environment.

Mizzou scientist directs unique center for monitoring

WORLD'S WEATHER

As Grant Darkow, atmospheric science professor, puts it, "We can't start talking about ameliorating the natural processes until we understand them."

One reason Columbia was chosen for the center is McQuigg. He has been on the atmospheric science faculty since 1968 and has worked with the federal government in various capacities since 1942.

The center, located in the federal building downtown, will have a terminal hookup to the University computer. Several graduate students will work with Mc-Quigg, splitting their time with the atmospheric science department. The center employs eight full-time scientists and will expand to 18 during the next fiscal year.  $\Box$  to aid in efficient distribution of earth's harvests

**By Cindy Felts** 

The football season is over. But Tiger coaches are busier than ever. It's recruiting time.

## By Steve Shinn

Talk about football widows. The wives of Al Onofrio and his staff will scarcely see their husbands until after February 19. That's national letter-of-intent day, the first opportunity for high school grid stars to finally commit to a particular college or university. (Big Eight signing day, binding only among the conference members, will be either February 4 or 11.) In the meantime, Tiger coaches are combing the countryside and ghetto-and the junior colleges-looking for football players good enough to compete with the likes of Alabama, Michigan, Southern Cal, Ohio State, Notre Dame, and, of course, Oklahoma and Nebraska. They must be good enough-and motivated enough-to compete in Mizzou's tough classrooms, too. To understand the hectic, intense atmosphere surrounding recruiting, it also is necessary to understand some factors seemingly inherent in big-time college football. First of all, there're the pressures for winning. People naturally like to be associated with a winner and, more tangibly, more persons will pay to see a winner play. With the soaring costs involved in college athletics and the fact that football is expected to provide the revenue to support almost the entire program, a full stadium becomes imperative. Lack of attendance

was the principle reason that coaches at Kansas State and Kansas won't be back next season. Losing was the underlying factor in the loss of attendance, and it takes good football players to avoid losing. Thus, the emphasis on recruiting.

Then, there's the NCAA limit of 30 football scholarships per year. Just two years ago, Big Eight schools could give 45. This means a school can't really take a chance on a marginal player. Only blue-chippers are sought, and the competition for them is brutal.

Onofrio also believes that the new scholarship limit hurts schools in areas of low population—like most of the Big Eight. It helps schools in the Big Ten. Southern California seldom gave more than 25-30 scholarships even when the limit was higher because of the availability of top-flight prospects in its own back yard.

"This means that we're going to have to do even a better-and quicker-job of identifying the Missouri prospect," says Onofrio, "so we can spend considerable time out of state." (Bob Broeg, sports editor of the St. Louis Post-Dispatch, predicts that by next year Onofrio will have a full-time recruiter on the staff and that the other coaches will spend more Friday nights scouting high school games in Missouri. But that's down the road.) During the recruiting season, the coaches' week starts with a staff meeting on Sunday. The list of 75 or so prospects is added to and pared down, depending on film appraisals, personal contacts, recommendations and general staff evaluations. Prospects are listed either as probable or possible signees. Some are dropped because they can't qualify academically, others because they simply aren't interested in coming to Missouri. Marginal prospects are marked, "hold," meaning the staff will see how many scholarships are left after the top-flight prospects are signed. (Roger Wehrli, the all-pro defensive back, got the last scholarship Mizzou gave in 1965.) This year, there were several junior college players on the list. By the time this is printed, Coach Onofrio hopes six or eight junior college transfers will be enrolled at Missouri—in time for spring practice as the Tigers prepare to tackle one of their all-time tough schedules: Alabama, Michigan, Wisconsin, Illinois and the Big Eight.

Monday mornings usually are spent catching up on correspondence, watching films, checking on the academic progress of football players already in school, making plans for weekend visits by prospects to the Campus and getting the week's travel plans firmed up. By afternoon, the coaches will have scattered, Vince Tobin to Kansas City, John Kadlec to St. Louis, Dick Jamieson to the Chicago-Peoria area, Tony Steponovich to East St. Louis (or maybe California), Charlie Cowdrey to a junior college or two or three. Onofrio will go where he's most needed.

A top-flight prospect becomes a "project." He will be visited in his home (recruits can't be "entertained" off-Campus) by his recruiting coach, his position coach, Ed Dissinger (the academic counselor), Onofrio and, perhaps,

key alumni. Alumni almost certainly will be called upon to provide summer jobs.

Friday the coaches return to continue with Monday's work and to get ready for the weekend visits of eight to ten or more recruits. Each prospect is allowed one paid visit to the Campus. These young men will meet with professors in their academic interests, tour the campuses, talk to student/athletes already in school and attend a banquet together Saturday night. They'll also go to a basketball game if the Tigers are playing at home Saturday. During their stay in Columbia, the prospects will be escorted much of the time by the Tiger hostesses, freshmen and sophomore women who volunteer to help the athletic department by conducting tours, meeting planes, etc.

Sunday morning, the coaches say hello—and goodby—to their families and another week's recruiting begins.  $\hfill \Box$