

CORVALLIS AREA FORECAST:
Increasing high clouds this afternoon with a chance of rain after morning fog and low clouds. High today 50. Low tonight near 35.

the daily Barometer

Wednesday

Oregon State University, Corvallis, Oregon

Vol. LXXXVII No. 91

February 17, 1988

Semester switch debated at meeting of boards

By PAT FORGEY
of the Barometer

The semester system conversion came under fire again Tuesday, when members of the state boards of education and higher education met together at Portland State University.

The higher education board directs policy at the eight state system of higher education schools, while the board of education is responsible for primary, secondary and community college education. The two are required by law to meet together once each calendar year.

Opposition to the change to a semester-based academic calendar was discussed by the boards.

Mike Holland, commissioner of community colleges, took no position himself, but warned of opposition from many community colleges.

"I would be remiss in my duty if I didn't ask the board to at least take another look at it," Holland said.

Several legislators have also asked the board to either reverse or postpone their decision.

Board of Higher Education President James Petersen criticized those comments for what he called their "threatening" tone,

saying that was the wrong way to get the board to act.

"Community colleges, as a group, are not interested in a legislative undoing of the board's actions," Holland contributed. Several board members were concerned with the as yet unknown cost of the switch.

"We were told that it wasn't going to cost any more money," said John Alltucker, higher education board member.

"I didn't believe that then and I still don't."

When the board voted, in January 1987, to switch to a semester system the chancellor's staff told the board that no additional money would be needed to facilitate the switch, and still defended that statement.

"We are expecting the costs to be absorbed as part of the administrative and faculty workload on each campus," said Larry Pierce, vice chancellor for academic affairs.

Higher education board member Robert Adams said he had received information indicating that additional laboratory facilities would be needed if the switch went ahead, and that no funds were available for that purpose.

Alltucker also noted that he was receiving mail against the

change at a rate of half an inch a week. The vote in favor of the switch was only 8-3, he said, and he asked for reconsideration of the measure.

Also asking for reconsideration was higher education board member Janet Nelson, who originally voted in favor of the conversion.

"I would like to go over it again—and I'm likely to fall into the minority this time," she said.

In other business, members of the two boards addressed a state system of higher education plan to require two years of foreign language for admission to state system schools.

That plan also drew fire, primarily from Ruth Hewett, chairman of the board of education. Hewett argued the plan would take limited resources away from teaching music and art appreciation, and other areas that are not yet adequately covered.

The joint boards also discussed an agreement currently being written up allowing for block transfer of credits from community colleges to state system of higher education institutions after the semester conversion.

Progress is going well on the agreement, Pierce reported, and the plan should be ready for adoption two years ahead of schedule.

Students from 13 countries give OSU taste of their cultures

By GARNEY MARSHALL
of the Barometer

Thirteen constituent organizations of International Students of OSU representing their native countries gathered in the MU Ballroom yesterday to increase awareness of their native cultures and traditions.

The annual International Travel and Cultural Fair, one part of ISOSU's International Week, gave international students the opportunity to share their countries' unique cultural traditions.

This year's theme for International Week is "Peace Through Understanding."

Each country had its own booth where OSU students from various countries discussed their native religions, food, dress and beliefs.

"This is a great chance to talk to other people. It lets us share some history and geography about our country," said Yuksel Yildirim, graduate student in mechanical engineering and vice-president of the Turkish Student Association.

"It not only gives us a chance to let them know what we are like, but it provides an opportunity to talk to people from America, maybe increasing their awareness and letting them know that we are here and want to communicate with them," he said.

"I really miss my country now that I'm talking about it. I hope you want to go visit."
—Noraza Abu Bakar

Other displays included native costumes from Malaysia, hand-made leather goods from Bangladesh, currency from Turkey, and traditional music from almost every country represented.

The fair also provided an opportunity to share beliefs and help clear up any misconceptions people may have about those in other countries, especially regarding topics such as religion, according to Bashir A. Amry, a member of the Muslim Student Organization.

"The fair gives us a good chance to answer any questions people may have concerning the Islam religion and the Muslims themselves," he said.

There are approximately 5 million Muslims in the United States, Amry said.

"People need to become informed about what we believe in and stand for because more than likely, the average American will sooner or later come into contact with us," he said.

"They need to understand our beliefs. One misconception that many people may have is that the Islam religion is to be blamed for what is going on in the Middle East, such as terrorism, and this provides us with a situation where we can educate people and help them understand that Muslims (followers of the Islam religion) are not to be blamed," he said.

A new addition to this year's fair was free pamphlets available



Amjad Khan (right) makes a move against Ishtiaq Jadoon Tuesday afternoon in a game of chess, or shatrang as it is known in Southwest Asia where it was invented. The game was part of a display by the Pakistani Students' Association, of which Khan and Jadoon are members, at the International Cultural & Travel Fair in the MU Ballroom.

at each booth containing a brief synopsis of each country's history, geography and background.

"This gives people something to take home and look at, hopefully helping them to better understand each country and maybe help achieve peace through this understanding," said Harish Pillay, ISOSU president.

Other countries represented at the fair included Palestine, Canada, Tunisia, New Zealand, Pakistan, Singapore, Indonesia, and Hong Kong.

Most of all, the occasion provided students a chance to talk about their home country and boast about their native food and cultures.

"I'm really going to miss Chinese New Year which is com-

ing up this Thursday," said Josephine Loo, a native of Malaysia majoring in fashion merchandising. Various dressy costumes intended to be worn for special occasions such as the New Year's celebration were on display.

Others talked about the weather and what their country looks like.

"It rains a lot during the winter, especially during November and December, it's worse than Oregon," said Noraza Abu Bakar, also from Malaysia, who is majoring in civil engineering.

"I really miss my country now that I'm talking about it," he said.

"I hope you want to go visit," he told those who stopped by, "it really is nice, especially during the dry months."

Campus



Just folks

Mark Weiss, Chere Pereira, Cliff Pereira and Tim Hardin entertain

in the MU Lounge Tuesday afternoon. The group sang folk and protest songs of the 1960's, as part of OTA week.

George Petroccione/Daily Barometer

KOPETSKI, from page 3

"I think we have a responsibility as a society to provide that safety net," he said.

Describing what congressional committees he would like to be on if he is elected, Kopetski chose the Rules Committee because it is "very powerful" and a lot can be accomplished there. He cited the Judicial or Banking and Urban Affairs Committees as alternatives.

When asked how he expects to run successfully against Smith with an underfunded campaign in comparison, Kopetski called himself a "master of low budget campaigns." Through past political campaigning for other candidates, he has found that lots of money doesn't necessarily mean victory, he said.

Kopetski said his campaign budget will be \$125,000-\$150,000 for the primary.

"Our goal is \$500,000 overall. We believe if that's all we need, that's all we need," he said.

HUMP NIGHT SPECIAL

JC's PIZZARIA

"Home of the \$5.99 Canadian Bacon or Pepperoni Pizza!"

ALL TAP BEVERAGES!!



Every Wednesday Night

300 SW Jefferson
758-1642

Open Hearing

MU BUDGET

11 a.m. to 1:30 p.m.

TODAY

MU 206

ASOSU supports child-care funding

By TERRI CRAIG
of the Barometer

An on-campus child care facility and an optional fee for library acquisitions on spring term registration forms were unanimously approved by the Associated Students of OSU in a meeting last night in the Memorial Union.

The senate expressed the need for a day-care center on campus because more students are returning to school after they have established families, and more young, single parents are attending.

The senate plans to direct the resolution to the OSU Foundation as a priority for funding.

"There are concerns about who would subsidize the facility. Students can't afford to pay the cost," said Mike Newton, engineering senator.

Heidi Davey, Panhellenic senator, presented a bill for an optional fee for library book and periodical acquisitions on the spring term registration form.

A questionnaire distributed to the students received positive feedback on the need for additional acquisitions.

An open hearing for concerns on the resolution for peace and justice in the Holy Lands will be held Tuesday, Feb. 23 in MU 105.

Jazz a la Carte

Featuring:

Oregon State University

Woodwind Quintet

Jointly Sponsored by:

Mortar Board

OSU Music Dept.

MUPC



12:30 p.m. MU Lounge

FREE DONUTS AND COFFEE
COMPLIMENTS OF MORTAR BOARD

OSU Book Stores, Inc.

BOARD OF DIRECTORS

Applications for Nomination as a Student Director for a two year term are now being accepted.

Application forms are available at the Cashier's window in the Book Store.

Election will be held in May 1988.

For more information, contact Tim Marshall, 2929 NW Harrison, Corvallis, OR 97330, 758-7351.

Applications must be returned to the Cashier's window in the Book Store by Wednesday, February 17.

Dad's Weekend

Tournaments

BOWLING

and

BILLARDS



Saturday Feb. 20th MU Lanes
10am-6pm

Sponsored By

Lyon's Restaurant, Abby's, JC Penney,
Sizzler and Gayles Fashion Connection

Kopetski urges domestic spending

By KRISTIN LILLIEBERG of the Barometer

The plight of children living in poverty is a national crime, according to State Representative Mike Kopetski, a candidate for Congress.

Kopetski discussed his campaign for the 5th District

against Rep. Denny Smith Tuesday afternoon in the MU. His visit was sponsored by the OSU Campus Democrats.

America's thirty-five million impoverished children represent "a crime...much more heinous than any crime that a drug trafficker can commit in the streets of Corvallis or the ci-

ty of Portland," Kopetski said.

Kopetski said that more federal money should go to domestic spending on human services, instead of being channeled abroad.

"As long as this country can spend money on the *contra* thugs in Nicaragua and the seven different police departments in El Salvador, I'm never going to accept the argument that we don't have the money for playgrounds and educational toys for our children," he said.

Elected to the state house in 1984, Kopetski's platform has focused around child-care and mental health reform. In 1987 he helped to pass a law that guarantees working mothers and fathers up to 12 weeks of unpaid leave to care for their newborn children.

Through his past efforts for Oregon, Kopetski said he expects to arrive at Capitol Hill. Instead of running against Smith, he said he is "running for Congress."

"I think I have some abilities and qualities and positions on the issues that ought to be voiced in Congress. This is not a 'dump Denny Smith' movement on my part," he said.

During a question and answer session, Kopetski said he believes that Oregon is spending too much money defending indigent criminals. Solving the problems of crime should center around preventative means.

According to Kopetski, there are 50,000 children who go

home after school to an empty home. He believes that since these children have to take care of themselves, this leads to association with the wrong crowds.

"Where are the role models they need when mom and dad are at work?" he said.

Society has changed dramatically in the past few decades with higher divorce rates and more parents needing to work. Kopetski said 26 percent of Oregon families are headed by single parents, mainly mothers.

The issue of crime has always been a tough political issue and Kopetski said he is not going to make any promises that cannot be kept.

"It's the same old approach that I see in the Oregon Legislature. It's the 'magic wand' approach that politicians offer to the public—I'll pass this bill and solve the problem, you know? It doesn't at all, but it's great re-election politics and we don't need that type of politician in this state or in this country anymore," he said.

On the issue of medical care for all citizens, Kopetski again believes that there is money, but that the "pie" is limited.

Oregon has a program that allows people working for an employer who doesn't have a health care plan to be eligible for transplants. Called the Medically Needy Program, Kopetski said the program should be adopted nationwide.

(See KOPETSKI, page 2)



Steve Wilkowske/Daily Barometer

Top banana

Douglas Crist, junior in liberal studies, was named editor of the *Daily Barometer* Tuesday by the University Student Media Committee. Currently news editor, Crist will assume his new position spring term.

Donut it fell good...
to be half way through!
FREE DONUTS to celebrate
OSU HUMP DAY
TODAY 11-2pm
MU Quad
Sponsored by MUPC

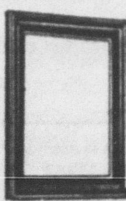


Educational Activities Committee

Open Hearing on Educational Activities Minor Budget Boards

Thursday, February 18th
4:30-7:00 p.m. MU 105

Picture Frames



- wood
- metal
- acrylic
- photo
- poster
- box
- pre-cut
- mats
- mat board

— The largest selection in the area—

THE INKWELL

234 SW 3rd • Corvallis



Milne Computer Center
Main office: room 217
Phone x3474 or x2494

UCS Micro-computer Labs
NOW OPEN WEEKENDS!
Saturdays Noon to 8:00 pm
Sundays 3:00 pm to 11:00 pm

15 IBM PS/2 Model 30s
22 IBM PC/XTs
12 Macintoshes

HP LaserJet
Apple LaserWriter

Wordprocessing
Spreadsheet
Graphics
Statistics
Languages
Desktop Publishing
And more...

\$1.00 OFF

on a 3 hr. Lab use card at

University Computing Services

One per customer, Regularly \$4.00
Offer good until 2/24/88

They're Here!

Come see the HOT new '88 models

RALEIGH

SPECIALIZED

Diamond Back

CENTURION



328 SW 2nd
BIKE N' HIKE 753-2912

Murphy's Tavern

Every Wednesday is

CORONA NIGHT!

- Free Peanuts •50¢ Nachos
- Discount Mexican Food
- Daily Lunch Specials
- Kegs to Go
- Pop-A-Shot Basketball
- Pool Tables •Video Games
- Big Screen TV

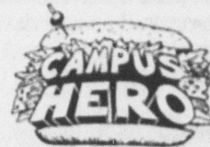
2740 SW 3rd Corvallis 752-3509

OSCO DRUG INC.

will be on the OSU campus
Thursday, February 18 to
interview for management
trainee positions.

Open To All Majors

To sign up contact the
CAREER PLACEMENT
CENTER on campus.



Submarine Sandwiches

\$1 OFF!
ANY
LARGE SUB

OFFER EXPIRES 2-24-88 INVALID WITH ANY OTHER OFFER

CAMPUS HERO 211 SW 5th 754-7827

**SUB-CONTRACTING
CATERING FOR ANY
JOB LARGE OR SMALL**

(COUPON)

Editorial

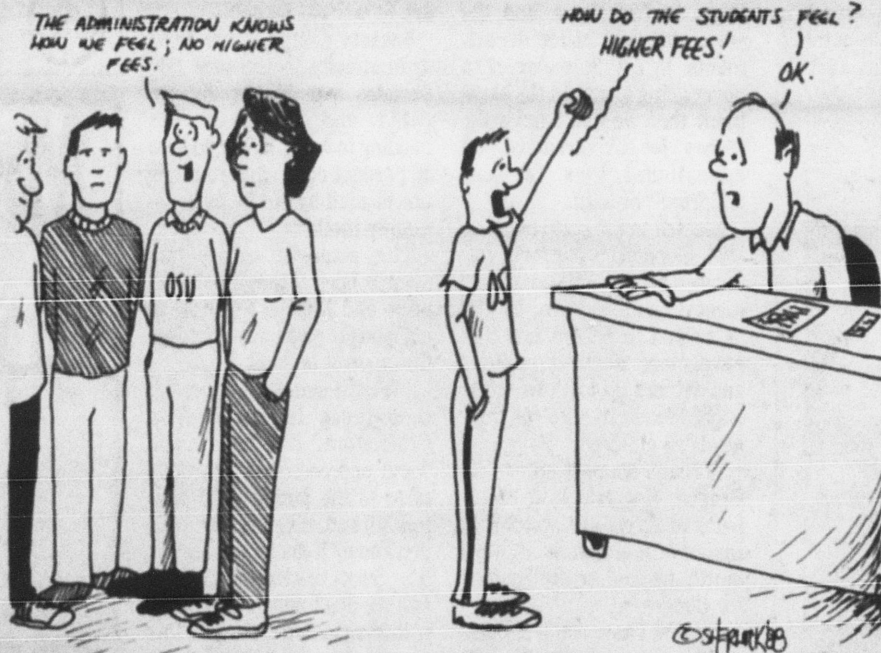
Get the straight scoop on athletic funding

If you don't speak out against paying more fees for the athletic department, sure as hell they'll be taking your money next year.

Tomorrow evening at 6 p.m. in the MU Lounge, ASOSU and the Department of Athletics will hold an informational forum about athletic funding at OSU. Each group will present its view of how funds should be raised and how those funds should be spent.

This is part of a concerted effort to get factual information out to you without filtering it through various interest groups. We strongly encourage you to attend and to ask your own questions. You must have good information before you can make an intelligent decision about these issues.

The Student Fees Committee and other budgetary groups need to hear strong arguments against fee hikes for athletics. The committee has, to date, heard primarily from students who favor raising everyone's fees from \$15 to more than \$22 per term. If one is to believe their arguments, we need to pay more fees so that more students will go to the games so the teams will



win more and we can all get better jobs when we graduate.

What is upsetting about this, besides the obvious, is that the committee has heard no arguments to the contrary. None of you showed up to just say that you don't want to pay more money to the athletic department. You have to

take the time if it matters to you how your money—\$102 per term for incidental fees, and counting—is spent.

One of the arguments bandied around by certain groups is that if everyone paid higher incidental fees, user fees (ticket prices) could be rescinded. It seems to us that if the

athletic department needs more money we should refrain from cutting existing forms of revenue.

According to OSU athletic department figures, every other Pac-10 school charges gate fees to its students. For both football and basketball tickets, each charges on a per-game basis and each offers season tickets at a reduced per-game rate. Current OSU ticket prices are among the cheapest in the conference.

Perhaps the athletic department and its advocates should acknowledge that lack of support from its fans may have something to do with more than ticket prices. It may even be because of lackluster team performance.

Whatever the reason, there is considerable undeclared resentment against the athletic department's continually squeezing students for money. However, they will get still more of it if you don't start making noise about it.

The open forum is Thursday evening at 6. Be there with your questions and opinions. You can make a difference. (DF)

Cardiovascular illness is Heart Month focus

By CHERYL GRAHAM
for the Barometer

Consider matters of the heart.

February is Heart Month, a time during which the American Heart Association puts particular emphasis on public education about cardiovascular disease (CVD) prevention.

Folks under 40 years of age tend to consider themselves immune to the various CVDs, which cause nearly as many deaths to Americans each year as all other causes of death combined. But although the risk of CVD increases with age, young adults are not risk-free by virtue of their age.

In fact, high blood pressure—just one of several CVDs—is not at all uncommon among college students. You aren't too young to be concerned about heart disease or to assess how your lifestyle may contribute to your risk.

In most people who suffer from CVD, there are usually multiple risk factors that play a role in it. However, if a single risk factor could be pointed to as most significant, it would be smoking. Indeed, smokers have approximately four times the risk of CVD as non-smokers.

If you're ready to quit smoking for yourself (rather than because someone is nagging you to quit), you can do so successfully. Smoking cessation may be the most difficult thing you'll ever do, but it's worth the effort. You can acquire help in your smoking cessation efforts from the Student Health Center and from agencies like the American Heart Association, American Cancer Society and American Lung Association.

High blood pressure is another major risk factor for CVD. More than 58 million Americans age 6 and older suffer from this condition. High blood pressure is appropriately labeled "the silent

FOR THE HEALTH OF IT

killer" because it rarely produces discernible symptoms that would send someone for treatment.

In fact, the only way to know that you have high blood pressure is to have it measured on a regular basis. A good time to begin your personal blood pressure monitoring program is at the health fair in the M.U. Ballroom this Thursday from 9 a.m. to 4 p.m. Students from the College of Pharmacy will be on hand to do blood pressure screening and referral for those with high readings.

Keep in mind that a single blood pressure screening may be meaningless in the diagnosis of high blood pressure. It is wise to have your blood pressure taken regularly—especially if you've had high readings—as often as your physician recommends.

If your physician determines that you have high blood pressure, you can lower your risk for heart attack and stroke by following his or her recommendations to control your blood pressure.

High blood cholesterol is another major risk factor for CVD. Excess blood cholesterol can cause a build-up on the walls of the arteries (plaque) which can narrow and ultimately close the artery, resulting in heart attack or stroke.

The body requires a certain amount of cholesterol, but the liver generally synthesizes sufficient quantities to meet these needs. That is why it is important to manage the amount of cholesterol

acquired in your diet.

The American Heart Association recommends that to manage dietary cholesterol, total fat consumption should not exceed 30 percent of caloric intake. Furthermore, the AHA recommends that this 30 percent of fat consist of equal amounts of saturated, polyunsaturated and monounsaturated fats. If all of this is confusing and you need help to plan your own heart-healthy diet, nutritionists at the Student Health Center can help you. Appointments are needed (call 754-2721) but there is no cost.

Diabetes represents a serious risk for CVD; it occurs most frequently during middle age and most often in people who are overweight. For people who have diabetes, it becomes even more important to control other CVD risk factors.

Obesity is significant in the development of CVD primarily because it contributes to other major risk factors: high blood pressure, high blood cholesterol and diabetes.

It is critical to understand that the term obesity does not refer only to one's weight. Obesity more accurately refers to the ratio of fat-to-lean mass. Indeed, people who appear slender may actually be obese when you consider their percentage of body fat.

The health fair tomorrow will offer an opportunity to assess how you measure up in the body fat department. Free body fat testing (using skinfold calipers and computerized calculations) will be done from 9 a.m. to 4 p.m. on the stage in the ballroom.

More than 30 health-related organizations will participate in the health fair to provide you with more information about CVD and other health concerns. Take advantage of the no-cost health screening opportunities available to you at tomorrow's health fair. Good health to you!

Graham is the health educator at the OSU Student Health Center.

Barostaff

Carisa Cegavske, Editor
Rick Prell, Business Manager
Phillip R. McClain, Production Manager
Frank A. Ragulsky, Student Media Advisor

Publishing under the authority of the Oregon State University Media Committee on behalf of the Associated Students of OSU.

The Daily Barometer (USPS 411-460) is published Monday through Friday during the academic year, with exceptions of holidays and final exams weeks, including a Mail Out issue in August and Back-to-School issue in September, at MU East, OSU, Corvallis, OR 97331. Subscription are \$36 per year. Second-class postage paid at Corvallis, OR 97333.

POSTMASTER: Send address changes to Subscriptions, MU East 106, OSU Corvallis, OR 97331

Assistant Production Manager: Keith M. Riehl
News editor: Douglas Crist Asst. News editor: Cynthia Holland Photo editor: Gary L. West

Asst. Photo editor: Steve Wilkowske Sports editor: Kyle Welch Design editor: Harish Pillay
Editor Emeritus: Pat Forgy Editorial writers: Carisa Cegavske, Douglas Crist, Pat Forgy,
David Furr Letters editor: Ross Jesswein Copy editor: Lauralee Myers Asst. Copy Editors:
Chris Dragich, David Enger, Heidi Hesse, Cecelia Pang, Fred Spade, Patricia Sweeney Night editor:
David Enger Montage editor: Nick Burns Frontiers editors: Cory Carpenter, Dan Mulligan
Cartoonist: Joe Sherlock

Reporters: Terri Craig, Gary Johnson, Kathy Knock, Amy Lam, Chris Lamoureux, Kristen
Lilleberg, Garney Marshall, Brian Omann, Rich Peterson, Todd Powell, Debra Rogers, Kevin
White

Sportswriters: Eddie Collins, Barry Finnemore, Rodney Hess, Rich Peterson, Cameron Schetter,
Shawn Schoeffler, Ted Trask

Photographers: Paul Cone, David P. Gilkey, Jennifer Hansen, Spencer McPherson, Jim
Michalek, Gregg Newton, George Petroccione, Keith Rude, Mark Scott

Newsroom typists: Heidi Reitmeier, Nalani Rosa

Advertising Representatives: Bryan R. Coppedge, Keith Dailey, Kathy Gutierrez, Lee Jackson,
Christopher Mike, Christine Sheppard, Scott Smith, Kurt Straube Asst. Business Manager:
Amy Rough, Bob Van Vleet

Composing Assistant: Kitty Garber Production artists: Cory Carpenter, Mark Crummett,
Peggy Coady, Megan Davis, Rihab Ibrahim, Kitty Garber, Jeannie Miner, Deanna D. Reisman,
Jan Spindler, Lisa Warner

News-754-2231, Business-754-2233, Composing-754-3172

Letters

Basketball enthusiasm

To the editor:

Some thoughts about the OSU basketball games and some suggestions for generating more enthusiasm.

First, a long overdue bouquet of roses to the OSU Pep Band. They are simply great! From the first fight song to the rousing rendition of the national anthem, it's hard to sit still when they are swinging.

Some suggestions for the band include the following: Have the whole band in their place at least 15 minutes before the basketball team is due on the floor. This would give them time to play the first fight song before the team comes out. Otherwise, there's no place for them on the floor.

I would like to see the band dress "crazy" more often. Their California Raisin was great!

I would like to see them do their bit with the horns down on the floor more often—where they are turning different ways. I don't see how they keep it straight and no one gets hit. It really generates a lot of enthusiasm.

I miss having parts of the band enter and exit in the balcony before the start of the game. One section would enter at a corner then exit at the next hallway, then immediately, another part of the band would enter somewhere else, until all parts of the band were entering and exiting while playing the fight song.

How many years ago did the band quit playing the little ditty before the fight song that went, "I'm a Beaver born and a Beaver bred, and when I die I'll be a Beaver dead, for it's rah rah for OSU rah rah for OSU, rah rah for OSU"? I miss it.

Perhaps the drummer could come up with a beat that could be played often during the game to keep the crowd going, with maybe a chant along with it.

Other thoughts and suggestions include: An extensive area-wide campaign to get more people to wear orange and black to all the games. Maybe give a prize to the section wearing the most orange and black.

We need a cheerleader on the basketball team, ala Charlie Sitton. Someone to raise their hands to the crowd when the crowd seems to be sitting on their hands. Eric Knox did this once when UCLA was getting ready to shoot a free-throw and the crowd really got into it, and the player missed both shots. Also, we need someone on the bench to swing a towel around in the air. This also gets the crowd into it.

A question. Is the athletic department cutting off their nose to spite their face? Yes, it was voted to reduce student fees to the athletic department, and this is why student tickets went from \$1 to \$4 a game, but I think a previous suggestion of having 5000 students at \$1 is better than 1000 students at \$4. I hope the athletic department will give this some serious thought.

Finally, this year's Benny Beaver shows a lot of ingenuity, spark and just plain fun. It's also good to have a companion Bernice Beaver. They have been enjoyable to watch. And the rally squad has been doing a good job this year. They have put a lot of thought into their routines.

Pat Moon
Financial Aid

Semester conversion

To the editor:

I am very concerned over the proposed move to two semesters from three quarters in our seven state colleges and universities, due to start August, 1990. This decision was made by the Oregon State Board of Higher Education and Chancellor Bud Davis, who is now resigning. Many Oregonians heard of it only after it was to be enacted.

I oppose it for several reasons. No public hearings were held. There would be great expense of lost teaching time and budget dollars as professors rewrite courses. Students would be at a disadvantage in course exposure as their choice would be reduced by at least one third. Many community colleges now are not planning to convert due to cost and other reasons after reviewing their generally older student population's needs. There would be a very real disadvantage for students transferring to state universities who now can do so any quarter.

Do we want our students restricted to transferring only fall term? Child care for the student parents-instructors in the two to three months the college schedule would conflict with that of secondary schools would be a big problem.

Oregon's dry season now coincides with college students' summer break allowing them to earn money in fire fighting, field and food processing, tourism, timber and construction-related activities. Many of these extend beyond Labor Day. Businesses would miss these motivated employees. This move should be reconsidered. This would give a new chancellor and staff time to reassess conversion. If you agree, please contact your legislators and others involved.

Faye Daellenbach

Mother of three children:

a 1986 graduate, a current OSU junior and a U. Wa. freshman

Reason, faith and valentines

To the editor:

A recent article by David H. Shreeve reminds me of an old saying, "There's two sorts of people, those who divide people into two sorts and those who don't." Reflecting on Valentine's Day, let's suppose, for the sake of argument, there are strictly two ways to acknowledge your Valentine, by reason or love.

If I gave a valentine based on love, the card would have said something like, "be my Valentine" or perhaps, "I love you Valentine." This doesn't seem to involve much reason does it? Somehow, I think we all would have sent a similar one.

On the other hand, I find it rather difficult to imagine how I could have sent a valentine using pure reason. Maybe it would have read, "if you do my laundry then I'll make dinner." Or maybe, "Let's live together. Think of the tax advantages!"

Actually, I don't split people up into two types. I must realize there are many ways people might have acknowledged their Valentine that did not involve reason or love. How about spite, friendship, hope or simply romance?

William Holtzinger

Junior in Math Education

More campus news

To the editor:

We believe that the Barometer should cover more campus news than national or international news. We also believe that there are many newsworthy happenings on campus which should be made known to the campus community. Perhaps special coverage could be given to what is happening in each of the colleges. Some of the campus student organizations also could be given more coverage. Many of us would like to know interesting things about campus. How about it?

Evelyn Madison

Management Assistant

College of Pharmacy

Barbara Duffy

Clerical Specialist

College of Pharmacy

Bookstore harassment

To the editor:

What I observed, along with other eye-witnesses, was so dehumanizing that I decided to share this disgusting event with your readers. It happened during the lunch hour on Feb. 11 in front of the Memorial Union.

As my friend and I were walking by the Memorial Union, I noticed that a man and a woman were starting what looked like a lover's spat. But upon closer scrutiny, we soon realized that this was not a lover's spat, but one of Lulow's skin-head goons forcefully trying to pull a ninety-five pound oriental woman back inside the Memorial Union. At no point did the thug present his credentials to the woman. Finally, a bystander, thinking that it might be an assault, yelled at the thug to let the woman go. Only at that moment did the goon identify himself as a store detective.

We should not and cannot accept this sort of excess by the "security" people. This is not the occupied Gaza Strip nor is it South Africa. Thus I ask that Mr. Lulow extend his apology to that woman for the harsh and apparently illegal treatment she received from one of his thugs. Even if she was guilty of shoplifting, her legal rights and human rights should have never been violated.

And finally, I extend my solidarity with the assaulted nameless woman. And if Mr. Lulow doesn't apologize to her, I urge that woman to get a lawyer and file civil suit against Mr. Lulow and that goon. I am ready to testify in her behalf any time in a law suit. And I am darn sure the other witnesses will do the same.

Max Ahmad

M.A.I.S. Candidate

Letters policy

The Daily Barometer welcomes letters to the editor.

Letters must be typed, double-spaced and, generally, 150 words or less. All letters will be considered for publication. However, due to the limited space available, brevity is encouraged.

Letters from students must include the author's signature, telephone number, academic major and class standing.

Letters from faculty members, administrators and classified employees must include the author's signature, job title, department name and telephone number.

Letters submitted by members of the community must include the author's signature, address and telephone number.

All letters are subject to editing for clarity and brevity. The Daily Barometer reserves the right to refuse publication of letters, especially those that may be considered libelous, are written in poor taste or contain factual errors. Photocopied letters will not be accepted. No materials submitted to The Daily Barometer will be returned. Letters reflect the opinions of those who write them and do not necessarily reflect the views of the Daily Barometer editors.

Op-Ed

Funding for athletics a never-ending drain

By John D. Kirby

Will the ongoing debate on funding the athletic department ever cease? The names have changed, but the same arguments persist. When I was a freshman here, 1976, the wizards in the athletic department said: (and I quote most liberally) "We have a new football coach (Mr. Fertig) and a nucleus of good players (including a Mr. Redwine). All we need is more MONEY to be competitive—nationally." On hearing this, I, along with many others, cheered and pulled out my parent's checkbook and said, "Sure, we'll pay more." And we did.

After "stopping-out" for a couple of years, I found myself in the University of Nebraska system (at Omaha). On arriving I found that the star I-back for the BIG RED was none other than Mr. Redwine. He was marvelous and helped the Cornhuskers win a majority of their games—and made the university lots of money in the process. I do not know precisely why Mr. Redwine left OSU, but rumor in Nebraska was that he wanted to be associated with a winning program. Granted, he never made it as big in the NFL as many would have liked, but he was a winner.

Now, eleven years later I have returned to OSU as a graduate student. The facilities are essentially the same, a few of the new buildings promised previously are now in use, but even dear old "condemned" Weatherford Hall is still utilized. Kerr Library looks the same, the Bookstore looks the same, and the demands for more athletic money look the same. The only thing that doesn't look the same is the bill I got after registration. Granted, I'm an out-of-state grad student, but the resident undergraduates do not have it much better. It seems to me that tuition and fees were under \$300.00 per quarter, and attendance at athletic events was first come, first served and no additional charge before.

Where is all this going to? Well, I wonder why no one is demanding a step-by-step review of the athletic department? If a manager spends too much money for an inferior product or mismanages resources, a chain of events is initiated that more often than not leads to his or her termination. What is the function of the bureaucratic machinery we have installed if not to provide the most worthwhile and efficient use of the limited assets we possess. I'm concerned about the apparent lack of effort to determine culpability in this whole affair. (Note that culpability here does not imply any particular action of wrongdoing, however in the management of public funds acts of omission can often be as detrimental as acts of commission).

Instead of holding the athletic department to the budget, an administrative call to "rally around the U. and give us more money" has been heard. Now those of us who do not make as much money as the honorable governor are being asked to contribute more, to make up for the errors and lack of accountability of those who do or nearly do. I guess this time I'm just not willing to pull out the old checkbook, and besides the money needed now isn't to make the teams competitive nationally, it's just to regain lost ground in the Pac-10. Perhaps a reduced emphasis on winning at all costs in intercollegiate athletics and an increased effort to operate within our means is the best solution to the ongoing problem.

I will also comment on Mr. Douglass' statements, on page 1 of the Feb. 10, 1988 Barometer concerning the importance of athletics. Granted, being a Pac-10 school has its benefits, but blind acceptance of unreasonable demands to continue fielding athletic teams is not a fait accompli. The fact of the matter is that many extremely successful research and academic institutions exist without the benefit of huge athletic programs. Among these are many of the better known, and extremely private schools, as well as programs like SUNY and Cal. State etc. Maybe the problem we need to solve before any other is the library. At least we know what is needed to fix that long-standing problem.

Kirby is a Ph.D. Student in Poultry Science

Op-Ed policy

The Daily Barometer staff welcomes Op-Eds.

For an Op-Ed to be considered for publication, personal consultation with the Editorial Page Editor is strongly advised.

Op-Eds must be typed, double-spaced and, generally, 2-3 pages in length. All Op-Eds will be considered for publication. However, due to the limited space available, brevity is encouraged.

Op-Eds from students must include the author's signature, telephone number, academic major and class standing.

Op-Eds from faculty members, administrators and classified employees must include the author's signature, job title, department name and telephone number.

International

Soviet stand undermines peace talks, says Pakistan

ISLAMABAD, Pakistan (UPI)—Pakistan accused the Soviet Union Tuesday of back tracking on the formation of an interim government in Afghanistan and said Moscow's position threatened to undermine negotiations on troop withdrawal.

A Foreign Office spokesman said Pakistan interpreted Soviet leader Mikhail Gorbachev's announcement last week on a possible withdrawal of Soviet troops—without linking it to the formation of an interim Kabul government—as a reversal of earlier commitments to such a process.

He said Moscow's position could jeopardize efforts by U.N. mediator Diego Cordovez to reach agreement on a withdrawal timetable at talks in Geneva and to negotiate separately on the for-

mation of an interim government to ensure a peaceful transition.

Cordovez envisioned an "intra-Afghan dialogue" involving the resistance forces, Afghan refugees and the Soviet-installed People's Democratic Party of Afghanistan on the formation of a new government, the spokesman said.

According to the U.N. envoy's general proposal, the spokesman said, none of the three groups would have a dominant position in an interim arrangement.

"Not only Pakistan but the Soviet Union, too, had endorsed the Cordovez initiative," the spokesman said in a briefing with reporters. "But suddenly Moscow has changed its position and insists on delinking the Geneva drafts from

the peace process.

"This could undermine the well considered Cordovez plan."

Pakistan, which has consistently denied legitimacy to the Soviet-installed Kabul regime headed by Najibullah, gives sanctuary to the Afghan resistance and hosts about 3 million Afghan refugees who have fled their homeland since the December 1979 Soviet invasion.

It has insisted on signing an accord at Geneva only with a "legitimate" government and demands the agreement allow for the orderly and safe return of the refugees to Afghanistan.

Soviet troops invaded Afghanistan in December 1979 to support a Kabul government beset by internal feuds and rebel attacks.

On Feb. 8, Gorbachev proposed a 10-month

withdrawal timetable for an estimated 115,000 Soviet troops in Afghanistan beginning May 15 if an accord is reached at Geneva by March 15 between Pakistan and the Soviet-installed regime.

The proposal left a "clear and unmistakable" impression the Soviets want out, the spokesman said. But he said failure to link a withdrawal to forming an interim regime led to "very serious questions" on whether the accord could be implemented and foreshadowed continuing strife in Afghanistan.

In last week's announcement, Gorbachev recognized the possibility of a flare-up inside Afghanistan following the withdrawal but did not address how to avert further bloodshed, the Pakistani spokesman said.

Israelis guilty of live burial promised severe penalty

JERUSALEM (UPI)—Defense Minister Yitzhak Rabin and two senior army commanders pledged swift and severe punishment Tuesday for Israeli soldiers accused of burying alive four Palestinian youths after a riot in the occupied West Bank.

The youths said soldiers beat them Feb. 5, then ordered the driver of an army bulldozer to cover them with a foot of dirt. Villagers said they rescued the youths, who had lost consciousness.

Revelations about the incident prompted an outcry in Israel and stunned military officials already under pressure from allegations that soldiers indiscriminately have beaten Palestinians to break up anti-Israel protests sweeping the occupied territories since Dec. 9.

Sporadic unrest continued Tuesday and one person was wounded by military gunfire in the West Bank. A number of towns and Palestinian refugee camps were under an army curfew order.

"For this generation of Israelis and Jews, the bulldozer incident attests to the depths of depravity to which even our soldiers, our own flesh and blood, can degenerate," the Hebrew-language daily newspaper, Davar, said in an editorial.

Two soldiers have been arrested but not charged in connection with the live burial in Salim, a village near the West Bank city of Nablus situated 30 miles north of Jerusalem.

U.N. urged to make press freedom a human right

GENEVA, (UPI)—Four leading press organizations called on the U.N. Human Rights Commission Tuesday to consider denial of freedom of the press to be a violation of fundamental human rights.

It was the first time associations of publishers, editors and journalists had made a concerted effort to place violations of media freedom on the agenda of the 43-nation U.N. body.

Officials of the Inter-American Press Association, International Press Institute, International Federation of Newspaper Publishers and International Federation of the Periodical Press concentrated on global violations of press freedom in statements to the commission's 44th annual session.

IPI Director Peter Galliner said his institute made 63 protests to 31 countries last year about press freedom violations. He said 25 journalists were reported killed, 10 kidnapped or "disappeared," 188 arrested, 51 expelled, 436 harassed and 29 beaten or clubbed.

"Ninety newspapers and radio stations were banned, 14 media plants bombed and 28 plants raided or equipment impounded," Galliner told the commission.

"The situation in countries such as Chile and Paraguay in Latin America, and South Africa and some countries in black Africa continue to be of special concern," he said.

Galliner said that although "some positive developments" in the Soviet Union and eastern Europe are evident, "this new openness represents a still highly restricted form of freedom."

Galliner also mentioned problems in Malaysia, Bangladesh, China, Hong Kong and India in asking the commission to include violations of press freedom in its annual deliberations on human

rights.

Ignacio Lozano, president of the 1,400-member publication IAPA, told the commission it has "too often passed over" the situation in Cuba, which has enjoyed no freedom of expression or independent media for nearly 30 years.

"Until recently Nicaragua seemed to be heading in the same direction," said Lozano, publisher and editor of La Opinion in Los Angeles.

"Under a peace plan put forward by President Oscar Arias of Costa Rica, however, several banned publications and radio news programs, including the newspaper La Prensa, have reappeared," he said. "With laws on the books that could still affect it, however, the future is uncertain, and the IAPA is among those watching to see if this relaxation of government control continues."

Bush, Dukakis win

CONCORD, N.H. (UPI)—Vice President George Bush won New Hampshire's Republican primary Tuesday over Sen. Robert Dole, and Massachusetts Gov. Michael Dukakis got his expected victory in the Democratic race. "It looks like Bush won and we came in second," Dole said as he watched the election

returns with his wife Elizabeth in his hotel room in Merrimack. "We made up a lot of ground here in the past eight days."

Bush, battered by the Kansas senator and former religious broadcaster Pat Robertson in the Iowa caucuses only eight days ago, showed surprising strength across the Granite State in a stunning recovery.

Bush had blown his 20-point New Hampshire lead in the public opinion polls after his humiliating third-place finish in Iowa but campaigned here doggedly this week in an effort to revive his presidential hopes. He did just that with his victory.

Bush was preparing to address supporters in Manchester.

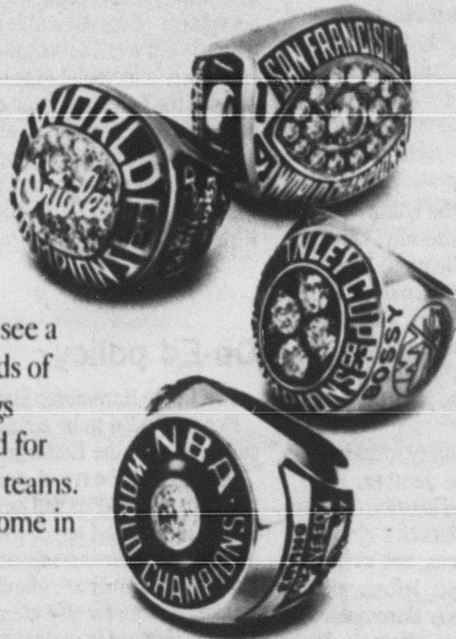
Dole said: "Obviously we would have liked to have won here. We didn't quite do it but we did a lot. This is one step along the road. It makes it a little steeper but it doesn't make it impossible."

Dukakis told CBS: "Although I'm a neighbor and a good neighbor, this was quite a test for me because I was asking the people of New Hampshire to look at me not just as a neighboring governor, but as a presidential candidate, and if all goes well...this will be a great victory for us."

The candidates campaigned even after the polls opened at 6 a.m., visiting polling places to meet voters one-by-one as they cast ballots that could make or break their presidential hopes. Robertson ran into Simon in one Manchester ward.

Come see how the champions remember their greatest moments.

The fact is, many of them remember the same way high school kids do—with a Balfour ring. And right now you can see a few of the hundreds of championship rings Balfour has created for America's greatest teams. You're invited to come in and see them.



Bring Dad to the OSU Bookstore to see Balfour's display of Championship Rings—Super Bowl, NBA, Olympics, World Series THEY ARE FABULOUS February 19th-20th 10am to 3pm

Balfour. No one remembers in so many ways.

Sports

Noteable quotes

By BARRY FINNEMORE
of the Barometer

Now, for your reading enjoyment, the Best Quotes of the Year (so far), brought to you by the wizards of word-smithing, the Oregon State men's basketball team:

Best defense—Congratulations, Eric Knox, you deserve it. After helping Oregon State beat the UCLA Bruins to a pulp Sunday, Feb. 7, Knox bobbed and weaved his way through the press room, made himself comfortable at the press table and proceeded to make a female reporter uncomfortable.

Knox was asked what UCLA head coach Walt Hazzard was talking to him about before the tipoff. The OSU guard calmly began explaining then suddenly questioned the masses:

"Is anyone here from the L.A. times?"

"Yes, I am."

"You guys ran a story a while back quoting me as saying that Rod Foster (ex-UCLA center who recently transferred to the University of Texas El-Paso) never should have gone to UCLA."

"I know myself, and I know I never would say anything like that..."

"I don't remember anything like that in the paper, but I'll check it out."

"You can check it out, but I know I never said anything like that. I thought Walt was going to take my head off."

the bare facts

At this writing, it is not known whether Knox was quoted as such in the Los Angeles Times, but his head is still intact.

Best at telling it like it is—Johan Reinalda, OSU's 7-1 reserve center, may wear a big uniform, big shoes, and fill up the paint better than Benjamin Moore, but his mouth is anything but big.

Asked by a reporter if the rowdy crowd hindered his production in last month's home contest against the University of California, Reinalda said, "No."

It's a good thing he's playing ball, because Reinalda would make a lousy politician.

Best at telling it like it is without actually telling it like it is—Oregon State head coach Ralph Miller, trying his darndest not to explain what he and Hazzard discussed during a halftime meeting of the Feb. 7 Beavers-Bruins rough and tumble game at Gill Coliseum:

"I can't say. It certainly wasn't anything derogatory about myself or the team. But what he did say I totally agreed with."

(Hint: They were chatting about the referees. Any questions?)

Best of the worst mathematicians—Congratulations Eric Knox, you deserve it again. Knox, commenting on beating once-Pacific 10 Conference powerhouse UCLA two times in two tries:

"It feels great. I mean, how many times in a season do you sweep UCLA?"

You answer that one yourself, fans.

Taking off to the Great White North—Being it's five days into the Winter Olympic Games in Calgary, it's about time for a U.S.A. medal check.

As of Tuesday, the American athletes hadn't won a single medal.

What's the problem, you ask?

Just name it. Inexperience is the culprit of the men's alpine, ski jumping and hockey teams. Waxing problems hurt America's chances for a medal in the men's 30-kilometer cross-country ski race.

So far during this Olympics, a fraction of the American athletes are doing what Americans in the 1980s are constantly doing: standing to sue.

That's right, during a time when brotherhood and friendly competition should be the norm, the U.S. speedskating team is at odds, mainly over the team selection process, and partly over the coaching of Mike Crowe.

If some athletes were unfairly left off the U.S. roster, it is indeed unfortunate. Four more years is a long time to wait. It's a shame medals and fame are being clouded by controversy.

Somehow, politics always steps in the path, and athletes are the ones who are tripped.

Scott possesses many qualities in pool

By NANCY BEGLEY
for the Barometer

Hand in hand with anticipation, anxiety fluttered about the rafters.

Bang!

Splash!

Potential energy transformed into a kinetic tidal wave of arms and legs flailing through the chlorine. The starting shot dissolved in a sea of shouting and cheering. Adrenaline fueled sleek, streamlined bodies as they skimmed across the water.

Swimming, as a sport, is very demanding and requires confidence, dedication and stamina. Those are but a few of Tammy Scott's qualities. The bright-eyed Californian is one of nine freshmen on OSU's women's varsity swim team.

Scott, majoring in sports psychology, is the daughter of Tom and Lois Scott of Riverside, CA. According to Tammy, her family has always given her full support. Her parents were always at the meets to watch her swim. Scott's interest in swimming developed 11 years ago.

"I started swimming when I was eight," Scott said. "My best friend had been swimming for a year. I decided to try it and hated it at first. Dad had to bribe me to swim on some days and then it clicked!"

Since then, she has devoted her mornings and afternoons to the endless demands of swim practice. As a college student and varsity swimmer, she has had to manage her time carefully, between swimming and studying.

"Academics were hard at first," Scott said. "I didn't do as well as I wanted to. I guess you expect that your first term. I think classes are going much better now."

According to Scott, making the transition from Riverside Poly Tech High School to OSU entailed a lot of pressure.

"I was used to daily doubles (two practices daily) before I came to OSU," she said. "I knew how to budget my time, but there is more pressure with traveling and home work. It's different not having my family around."

The 16-member women's swim team is 11-2 on the season. Head coach Laura Worden attributes the success of the team to the variety of talent. The predominantly young team doesn't have any major "glaring weaknesses," she said.

Scott is holding her own on Worden's depth chart.

"Tammy is listed in 10 of 14 events," Worden said, referring to the depth chart. "She's first in the 100-yard freestyle, and second in the 200-, 500- and 1,000-yard freestyle."



George Petroccione/Daily Barometer

Even though swimming takes up most of her time, OSU freshman Tammy Scott also enjoys running and an occasional game of racquetball. Scott is listed in the top five in 10 different swimming events on head coach Laura Worden's depth chart.

Scott has the fourth fastest time in the 50-yard freestyle and is the third fastest in five other events.

According to Worden, Scott has a lot of skills, versatility, and has by far the fastest times in workouts.

"She's a real leader in practice, she pushes the others," Worden said.

The vivacious freshman is no stranger to tough competition. Two Olympic swimmers have come from her high school. Since her sophomore year in Poly Tech High, she has participated in the United States Junior Nationals.

"I might not go to the Junior Nationals this year because it is the first week of spring term," Scott said. "I don't want to miss classes. I think I'll work towards nationals instead."

It's a hard decision to make, she said, because she has always participated in the Junior Nationals.

Scott enjoys living in Buxton Hall and the friends she has made on her floor.

"I like the campus," Scott said. "There is something neat about it. I like the old look."

According to Scott, OSU has an "Ivy League" look to it. Aside from the appearance of the campus, Scott likes the college-town image.

Last spring term, Scott visited OSU for the first time, during recruiting week.

"I was kind of negative about going here at first because it was so far away," she said. "After visiting the campus last spring, I decided I liked it. Although, it was still a tough decision because I liked Long Beach State too."

Even though swimming takes up a lot of her time, Scott said she enjoys racquetball, running and going to the beach. Two California beaches Scott and her friends liked to visit were Newport and Huntington.

Although her California friends are still close to her heart, the OSU swim team has become a very close group of friends, according to the 18-year-old.

"It's not like we just swim with each other," Scott said. "The swim team is more like friendships. We do things together on the weekends. Sometimes we get together and have movie parties."

In two weeks, OSU will be hosting the Pac-10 swimming championships in Beaverton. Worden said the team will have tapered workouts until then, producing the desired quality performances by allowing the body to rest.

Worden believes Scott has learned what it means to compete at a collegiate level.

"We've worked on helping Tammy relax and on building up her confidence," Worden said. "I believe she will better all of her season's times at the up and coming championships."

Overall, Worden has been very pleased with Tammy and is happy to have her at OSU. "I have high expectations for her and believe she will represent OSU very well," Worden said.

Frontiers Science & Technology magazine

February 17, 1988

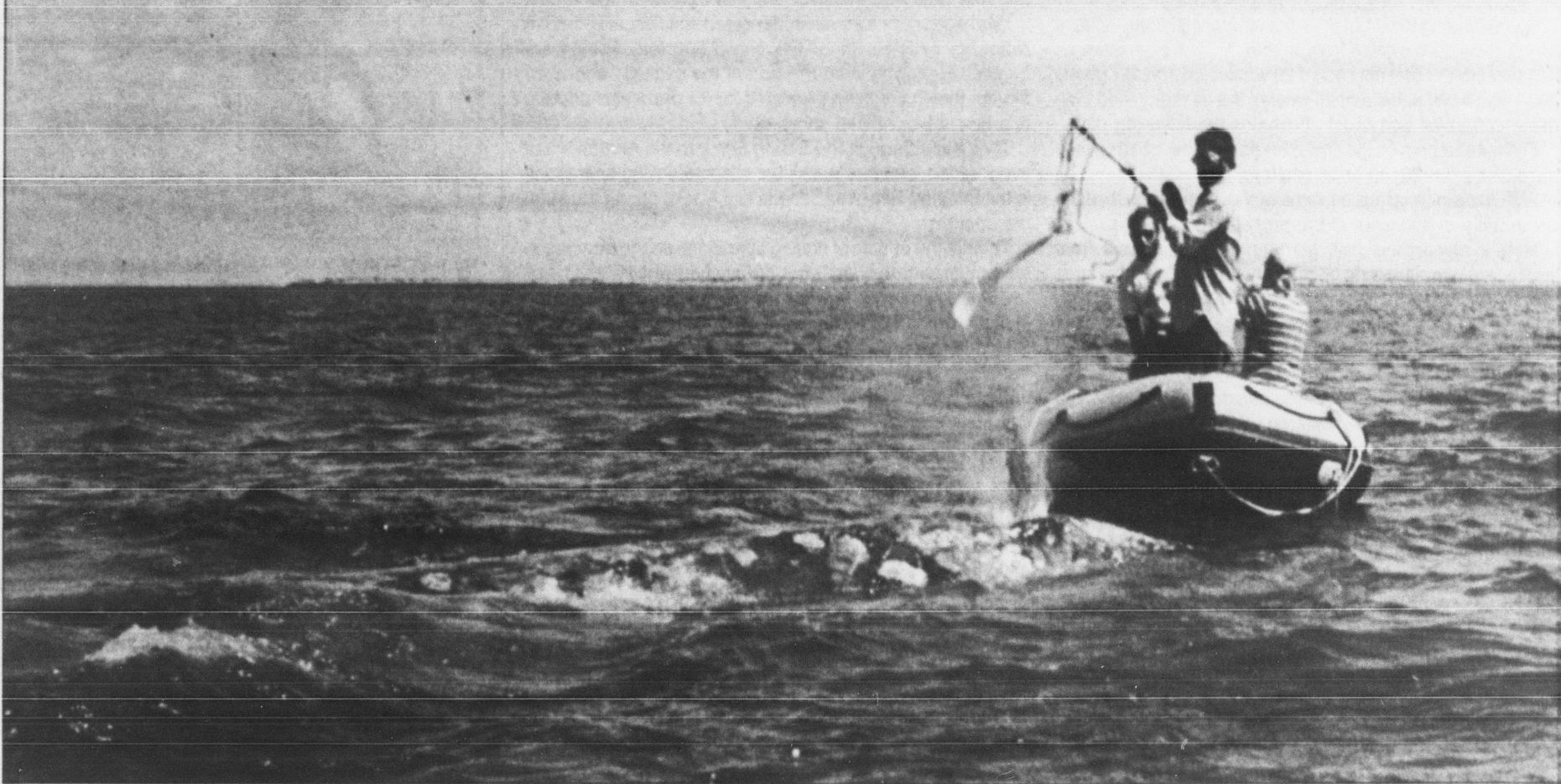


Photo courtesy of Sea Grant Communications

A bird's-eye view of whales

OSU researchers tag whales for satellite tracking

By PAT FORGEY
for *Frontiers*

Commercial whaling has lowered the populations of many species of whales to levels so low that even after whaling stopped, the existence of some species is still threatened.

To compound the problem, marine biologists trying to help the giant mammals survive are finding that they don't know enough about the whales to find ways to help them.

The dilemma has oceanographers and marine biologists like OSU's Bruce Mate looking for innovative ways to learn more about them.

"Many environmental groups think we have saved the whales because public pressure has stopped hunting," Mate said, "but are we now going to destroy their environment?"

"If we knew where their breeding grounds are, we could route ships away," Mate said from his office at the Hatfield Marine Science Center in Newport.

Because so little is known about whales, especially some of the endangered species, vital information like the location of their breeding grounds is just not known.

In an effort to increase the amount of knowledge available about the whale's entire lifecycle, Mate is working on a system which uses radio transmitters attached to the whales to track their movements.

In addition to telling Mate precisely where the whale is, the transmitter sends a variety of other data, such as water temperature and dive duration, to his Newport office via satellite.

After several years of preparation, including tests of the satellite tracking system on manatees in Florida, the first long-term open sea test of the transmitters was done in the Atlantic Ocean last summer.

Three small pilot whales, each weighing about 1,000 pounds, were rescued in New England after all the other whales in their pod beached themselves and died. Those whales were chosen to be the first recipients of the transmitters.

The three whales spent six months in a tank at the New England Aquarium, and prior to their release into the wild, Mate was asked if he would like to try out his transmitters on them.

Mate jumped at the chance to try out the procedure, and went to New England to install the transmitters on the whales.

Two of the whales received conventional short-range transmitters, and the third, promptly nicknamed "Tag," got a satellite transmitter.

The New England Aquarium wanted the test so they would know if their work in rescuing the offspring of beached whales was worthwhile. Prior to the development of Mate's tracking system, no one knew if the rescued whales could survive in the wild.

Also of concern was whether the transmitter would have any effect on the whale. No matter how much research was done, only actual practice would tell if the tagged whale would be able to swim effectively, be accepted by other whales, and be able to function as it would without the tag.

Before the batteries died, the transmitter relayed vital information to Mate for 95 days. In that time the whale traveled over 4,700 miles of ocean, stayed with the other whales that it had been released with, and joined a pod (a group) of other whales.

"That lets me know it's accepted socially and it's able to keep up," Mate said.

"An animal doesn't move that far unless it's healthy," he said.

The experiment with the New England Aquarium's pilot whales ended successfully for everyone involved: the aquarium knows the whales they rescue from beaches can survive in the wild, Mate knows his transmitters work in the real world, and the whales are doing fine.

In an earlier test, Mate had tracked a gray whale with a conventional, non-satellite radio transmitter, as it swam from Mexico to Alaska.

"We literally had to follow it along Highway 101 in a car," Mate said. That transmitter had an effective range of eight

miles.

The transmitter was installed off the Pacific side of Baja, Mexico, and was last picked up off Unmiak Pass, at the tip of Alaska's Aleutian Peninsula. The whale took 95 days to travel 4,250 miles, Mate said.

Because gray whales like to stay close to shore, that method worked, but it won't on any other species.

(See **WHALE TRACKING**, page 2)

Livestock grazing new forestry tool?

By Carolyn Powell
for *Frontiers*

Why would a forester let cattle graze on a young tree plantation? Wouldn't the cattle munch the tender trees like party mix? Research has shown, with planning, cattle can benefit the seedling trees.

Newly-planted trees need protection, especially when competing for space against native vegetation. Some of the young tree's enemies include grasses, shrubs, and forbs (flowering grasses like alfalfa). Because competing plants grab a young tree's share of water and sunlight, foresters need a tool to eliminate the competitive

plant species from tree plantations.

Herbicides are one effective and widely-used tool. During the past few years, public concerns about the health and environmental impacts of herbicides have led to bans of herbicide use on federal forest lands. Some of these bans have recently been lifted.

Other vegetation control methods include manual removal and paper mulching. Manual removal is grueling, time-consuming work. Axes, picks, and muscles must wrestle stubborn brush from the ground.

Paper mulching involves

(See **GRAZING**, page 3)

WHALE TRACKING, from page 1

The more conventional method for tracking of whales calls for following them in oceanographic research vessels like OSU's R/V Wecoma.

The advantage of Mate's method is that the satellites cost a few thousand dollars a year to use, while research ships cost a few thousand dollars a day.

In addition, researchers need to know how whales act in their natural environment. If there is a research vessel following them closely, they may not react naturally.

Compounding the problem is the inherent difficulty in identifying individual whales from a ship.

A research vessel may count 20 whales on one day, move 200 miles away and count 20 whales the next day, and then move 200 miles and count 20 whales the following day.

The researchers on the ship then don't know whether they have just seen 20, 40 or 60 whales.

With transmitting tags on some of the whales, much of the uncertainty is taken out of the process.

Mate's research is also garnering some interest from weather researchers who need to know water temperatures to make accurate long-range weather forecasts.

Satellites can easily measure surface temperatures, but they have no way to measure the deep ocean temperatures which play a vital role in long-term weather patterns.

Temperature gauges on whales can do the job easily. The other alternative is to use research vessels at the aforementioned \$2,000 a day.

Several years ago, when Mate first began to try tracking whales (funded by a grant from the Office of Naval Research), he thought the program's chances of success were so low that it would be an inappropriate project for graduate students to work on.

"I don't feel a graduate student should enter into a program unless there is a reasonable chance of success," he said.

The success of Mate's whale tracking system has attracted interest from other areas. His next project will involve tracking whales in the Arctic, where they come into contact with oil drilling rigs.

Mate will be placing tags on bowhead whales in the Beaufort Sea, and will track them as they roam the Arctic.

Bowhead whales are an endangered species, and marine biologists estimate there are only 7,500 left. They were hunted extensively near the turn of the century, and even though they have been protected for 50 years, the population has not increased substantially.

They head through the Bering Sea into the Arctic Ocean every spring, and they pass near offshore drilling operations in the Beaufort Sea near Canada and Alaska during the summer months.

Though the effects of drilling operations on the bowheads are not known, they are shut down when whales are nearby. Shutdowns cost nearly a million dollars a day, and the industry would like to find ways of avoiding the shutdowns.

Mate's research has been funded by the Department of the Interior's Minerals Management Service, which may continue to do so in the future.

If Mate's study enables marine biologists to determine which specific drilling operations may be harmful to whales and which ones have no effect, millions of dollars of unnecessary shutdowns of drilling operations can be avoided.

More importantly, aspects of drilling which are found to be damaging can be eliminated or replaced by less damaging alternatives.

Whale-watching goes high-tech



Photo courtesy of Sea Grant Communications

Bruce Mate shows off his satellite transmitter at the Hatfield Marine Science Center in Newport. This transmitter is an early prototype model; the newer versions are one third the size and last five times as long.

By **PAT FORGEY**
for *Frontiers*

The whale-borne transmitting device is the epitome of the high technology age, containing several sensors, batteries, a microcomputer and a transmitter powerful enough to reach a satellite orbiting far overhead.

Those features, all con-

tained in a casing the size of a large coffee cup, are what makes the entire whale tracking program possible.

Bruce Mate, a marine biologist at OSU, designed the transmitters himself, and had them custom-built by an Arizona electronics firm

(See **TRANSMITTER**, page 4)

Balfour College Class Rings -




Get Dollars Off Now!

\$50⁰⁰
Off the Retail Price
When you buy any men's or women's 14 karat gold Balfour College Ring.

\$25⁰⁰
Off the Retail Price
When you buy any men's or women's 10 karat gold Balfour College Ring.

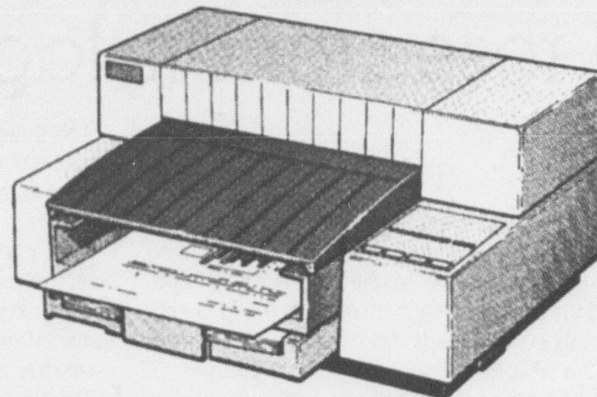
Act Now! Offer Expires:

Get your Balfour ring at a special savings at:
OSU BOOKSTORE
February 19th-20th
10am to 3pm

 **Balfour College Class Rings**
No one remembers in so many ways.

See It TODAY!

The HP DeskJet Printer: See laser quality output for under \$1000. **



We've got great news for all of you who want the clean, crisp look of laser output without the laser output price.

Hewlett-Packard's new DeskJet personal printer offers a step up to laser quality for less than \$1000!

DeskJet is quiet, simple to use, the perfect size for your very own desk. It's compatible with the leading personal computers and supported by your favorite software. And like a laser printer, you can expect sophisticated, high-quality output with multiple fonts.

Come in and compare for yourself—if you can see a difference, you must be looking at the price!

Call for an appointment to see it today at:

OREGON DIGITAL COMPUTER PRODUCTS, INC.
881 NW Grant Ave., Corvallis, OR 97330

 **HEWLETT PACKARD**
AUTHORIZED DEALER

753-5554



** Ask about Educational Discounts for Students, Faculty, and Staff.

GRAZING, from page 1

the use of thick, roofing-like paper to shade-kill the vegetation. A two-by-two foot square of paper is first fitted like a Christmas-tree blanket over the top of the young tree, and then staked down. This method is effective, but only a small area around the tree is treated.

Researchers at OSU have been looking at livestock grazing as a silviculture tool. Silviculture is the science within forestry dealing with the establishment and growth of trees. Grazing uses biological muscle, and can be an effective tool for foresters.

The use of animals instead of chemicals is appealing; but before any method of vegetation control can be widely used, it must be manageable, cost-effective, and legal.

Livestock grazing meets these criteria. Grazing is less labor-intensive than many manual methods. In addition to labor savings, revenue from grazing fees is also a bonus. With proper planning and management, livestock grazing can be an excellent tool for use on forest plantations.

Researchers from OSU's rangeland resources department have recently investigated the impact of cattle grazing on young conifer growth, in an effort to determine its value as a silviculture tool. The study was conducted by William Krueger, department head, and Paul Doescher, assistant professor of rangeland resources and former masters student Mabel Alejandro-Castro. The effort was made possible by a grant from the Bureau of Land Management.

Historically, livestock and

silviculture have not mixed well. The raising of trees and grazing by cattle in the same area has long been thought of as something completely incompatible. In the past, livestock grazing on seedling plantations meant trampled and nibbled trees. Livestock need forage to graze, yet vulnerable young trees die if grazed.

A plant will starve if it doesn't have enough canopy (the leaf or blade space that is exposed to sunlight). If a seedling is shaded by competing vegetation, the young tree does not have enough canopy. Insufficient canopy prevents photosynthesis, and the tree will eventually starve.

In the growing season, competition for water is fierce. Native vegetation often has the advantage. As most gardeners know, growing weeds is easy—it's the produce that's touchy.

A plant is like a runner in a race. Without enough water in her system, she can't finish the race. She'll drop from heat exhaustion. A plant in the growing season can't mature without water. The thirsty plant will droop, then die.

When livestock grazing is managed carefully, it can benefit silviculture. The goal of grazing as a silviculture tool is to "overgraze, but not quite kill competing species," Doescher said.

Grazing should begin early in the growing season, when the grass is four-to-six inches high. Early grazing reduces the grasses' ability to compete with trees for soil moisture and canopy.

"Palatability" is the reason grazing works. According to Doescher, palatability is "plant characteristics that

cause animals to select the plant." Tender young grass is an "ice cream" plant for livestock. Trees have a bitter taste, and therefore low palatability.

With enough available grass, cattle will not select trees for food. It is only when other palatable forage is scarce that cattle will resort to eating trees—kind of like the old saying, "If you get hungry enough, you'll eat your spinach."

Although some plantations have an even covering of palatable grasses, most don't have enough to allow livestock a tree-free diet. To ensure even coverage of alternative forage, foresters can seed plantations.

Seeding may seem counterproductive, but it works for two reasons: It encourages consistent grazing of the seeded and native vegetation—cattle eat the native forage along with the tasty grasses; seeding also muscles out many of the low palatability, highly competitive native plants.

To study the effect of grazing on conifer development, the researchers chose two test sites in southwestern Oregon. Each site was divided into four similar areas, and each received a different treatment. The treatments included "traditional silviculture" (paper mulching), "native-grazed" (native plants grazed), "seeded-grazed" (introduced plants grazed), and "seeded-ungrazed" (introduced plants, no grazing).

The traditional silviculture plot provided a good contrast to the grazed plots, while the native-grazed plot used livestock to control the natural competing vegetation.

At the research sites, the native vegetation had a low palatability. This resulted in minimal grazing of the competing vegetation. Livestock was removed before grazing of trees could start.

Another test plot was treated with a perennial ryegrass seed mix. The seeding produced a uniform stand of palatable vegetation, encouraging even grazing. With palatable forage available, trees are safe from grazing. If you put kids in a candy store, you wouldn't worry about spinach quiche disappearing from the pastry case.

The seeding treatment also reduces growth of low-palatability forage, especially shrubs. Shrubs require more canopy and water than grasses. Replacing native shrubs with seeded grasses reduces the strain on seedling trees.

As a contrast to the seeded-grazed plot, another plot was seeded but not grazed. This plot allowed researchers to see how much impact shrub replacement had on the growth of trees in the

absence of grazing.

The four treatment plots were evaluated three times a year (before, during and after the treatment) over a two-year period. Each plot had trees marked and mapped, and tree growth (height and diameter), browsing (nibbling), trampling and overall condition of the seedlings were evaluated.

The researchers concluded that grazed plots had less competing vegetation than the ungrazed plots. Because more of the stored soil moisture was available to trees in the grazed areas, the moisture content of the trees was improved. In short, grazing had a positive impact on the growth and survival of the young trees.

What impact will this research have on the timber industry and the state of Oregon?

The timber industry may consider seeding and grazing as a silviculture tool. After a plantation's characteristics and costs are determined, the most beneficial vegetation control method is chosen. The flexibility of hav-

ing another control method is a blessing for foresters.

The income of grazing fees might also be a boon to foresters. Although the fees probably wouldn't be large, they could help offset costs.

Oregon's Willamette Valley is the major grass seed-producing region of the world. If Oregon foresters decided to seed their plantations with Oregon grass seed, it could encourage growth of the local economy.

Ranchers are another group which could benefit by the combination of silviculture and grazing. Grazing forest land would provide new pasture land. And since renting land has advantages over buying, less capital would be tied up, giving the manager more planning flexibility.

Since grazing is a natural method, it would be less hazardous and frightening than the use of artificial vegetation-control methods with their risk of chemicals which could contaminate the food chain. Grazing's only byproducts would be fertilizer and nitrogen.

ANNOUNCING

Open Hearing Regarding the Budget
for the Student Health Center

Wednesday, February 17

1:30 — 3:30

M.U. 211



Call 754-3106 for more information

HEALTHY STUDENT BODIES
OSU Student Health Center



**Two men set out
to save her.
But only one
can have her.**

*"She's the mother
of my child."*


*"But she's
my wife."*

The rescue of Anna

General Hospital

Weekdays on ABC-TV

Check local listings for time and channel.



TRANSMITTER, from page 2

called Telonics, Inc., at a cost of \$5,000 per unit.

Though the unit is extremely small, its signals can be easily picked up by a satellite 500 miles overhead and as much as 1,600 miles away, Mate said.

The sensors include temperature gauges and timers to measure the length of each dive, as well as average dive length. Future models may include depth gauges or other sensors.

The electronic signals from each whale's transmitter are picked up by one of two National Oceanic and Atmospheric Administration satellites, and are relayed electronically to Mate's office at the Hatfield Marine Science Center.

"I can monitor an animal

on the East Coast while sitting in my office in Newport," Mate said.

The transmitter is molded to fit over the whale's dorsal fin, with quarter-inch pins through the fin holding the transmitter securely in place. Orthopedic plastic, similar to that used in replacement hip joints, is used for the pin.

Because Mate wants to ensure that the transmitter in no way endangers the whale, the pin is designed to break free if it becomes entangled in rope, nets, or any underwater obstruction which could threaten the whale.

When the transmitters were being installed on the three pilot whales in New England, one of them became entangled in a net during release.

The pins broke free, the transmitter fell away, and the whale swam free.

In spite of the disappointment over the loss of the transmitter, it was comforting to know the carefully designed breakaway system actually worked in practice, Mate said.

Another attachment system, designed by Mate, uses sharp needles which suture themselves into the whale's blubber. The needles are coated with antibiotics to prevent infection.

The lack of nerve endings and blood in the blubber means there is no discomfort or danger to the whale, Mate said.

The process "duplicates the way a barnacle attaches itself to a whale naturally," Mate said.

The first transmitter Mate installed on a gray whale broadcasted for 95 days as the whale covered 4,700 miles before the batteries

gave out.

The working life of the transmitter is limited by the life of the batteries contained within.

There are three batteries inside each transmitter, and each is about the size of a typical "D" battery, though they are an organic-lithium type which lasts many times longer.

To save battery power, the transmitter is only in operation when the whale is on the surface and the satellite is overhead.

The transmitter emits a two-watt signal which the satellite picks up. By measuring the Doppler effect as the satellite approaches and then leaves the whale, the source of the signal can be estimated to within 500 yards.

The transmitter is designed to break away of its own accord six months after installation, so the transmitter

is not permanently attached to the whale.

Battery life is tied to the number of times the whale surfaces, but prior to putting a transmitter on a pilot whale, no one was sure how often

pilot whales surfaced.

It turned out that pilot whales surfaced twice as often as was earlier thought, and the batteries only lasted half as long as Mate had estimated.

Calendar

Wednesday, Feb. 17

Presentation: "Plans of the new ship AGOR 23 to be built by the Navy for OSU, University of Washington and University of Alaska" Brian Lewis, University of Washington 3:00 p.m., Burt Hall, room 176

Seminar: "Foraging Ecology of Canada Geese at Finley National Wildlife Refuge" Maura Naughton, OSU Dept. of Fisheries and Wildlife 3:30 p.m., Nash Hall, room 206

Thursday, Feb. 18

Seminar: Forestry and Wildlife Management Interactions: "Inventory of Forests: Forest Habitat—LANDSAT; Forest Resources-GIS" Dan Edwards, Oregon Dept. of Fish and Wildlife; Miles Hemstrom, Willamette National Forest 4:00 p.m., Forestry Sciences Laboratory, room 200

Wednesday, Feb. 24

Seminar: "New Threats to the Science Community" William Lurch, OSU Dept. of Political Science 3:30 p.m., Weniger Hall, room 127

Friday, Feb. 26

Seminar: "Irrigation Efficiency in Eastern Oregon" Dr. Walt Trimmer, OSU Dept. of Agricultural Engineering 3:30 p.m., Gilmore Hall, room 234

Thursday, March 3

Seminar: Forestry and Wildlife Management Interactions: "Sociological Considerations—Background; Environmentalist's Concerns" Perry Brown, OSU Dept. of Resource Recreation Management; Sara Vickerman, Defenders of Wildlife 4:00 p.m., Forestry Sciences Laboratory, room 200

Wednesday, March 9

Seminar: "The Washington Think Tanks and the Policy Environment" Emery Castle, OSU Dept. of Agricultural and Resource Economics 3:30 p.m., Weniger Hall, room 127

ASOSU and the DEPARTMENT OF ATHLETICS present AN OPEN FORUM ON ATHLETIC FUNDING AT OSU

Topics Include:

- The current deficit
- Future funding plans
- Incidental fee issues

WHEN: Thursday, February 18, 6:00 p.m.

WHERE: MU Lounge

"Your comments and questions will be welcomed."

#3 TURKEY & CHEESE \$2.59

3 1/2 ounces of fresh oven roasted turkey

This is an example of our everyday low prices on sandwiches. We have 34 different sandwiches to choose from.

All are truly "A MEAL IN A SANDWICH."



2015 NW Monroe 753-1444

CELEBRATE HEALTH!

OSU Health Fair

M.U. Ballroom

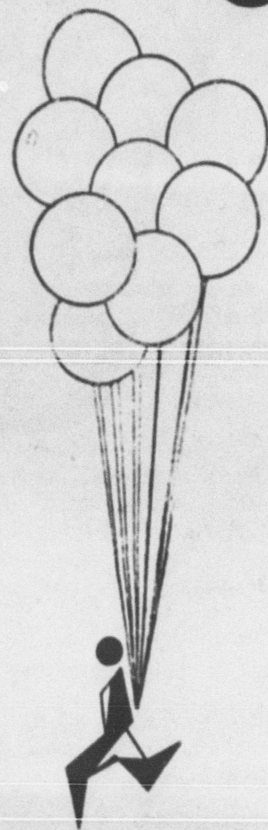
9am to 4pm

Thursday, February 18

Why Should You Come to the Health Fair?

- Computerized Health Risks Analysis
- Computerized Diet Analysis
- Body Fat Testing (Skin-fold calipers)
- Vision and Glaucoma Screening
- Hearing Screening
- Blood Pressure Screening
- Anemia Screening
- Peridontal Disease Screening

And More...Come check it out!



HEALTHY STUDENT BODIES
OSU Student Health Center

The Health Fair is sponsored by the OSU Student Health Center, the College of Health and Physical Education and the Health and Physical Education Student Council as part of OSU Health Days.

Frontiers Staff

Editors: Cory R. Carpenter, Dan Mulligan

Contributing editor: Pat Forgey
Photo editor: Steve Wilkowske
Copyeditor: Lauralee Myers
Contributor: Carolyn Powell
Staff writer: Jana Larsen
Staff typist: Kitty Garber
Production: Keith M. Riehl
Darkroom technician: Mark Crummett
Production artist: Jeannie Miiner

Frontiers focuses on new discoveries and trends in the world of science and technology with emphasis on research being conducted at OSU. We also present information and articles on national and international developments.

Our calendar section lists lectures, presentations and seminars scheduled in the Corvallis area for the upcoming weeks.

Please address comments or suggestions to: Frontiers Editors, Daily Barometer, MU East room 106, OSU.

In future issues: Heredity, DNA and skin cancer; Artificial intelligence; Northwest's largest bug collection.