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people. They all answered tough questions,
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remarkably patient and friendly through it
all. Never knowing they were being filmed.

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funny TV commercials. But also very reveal-
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Photo by Glenn Oakley.

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Flows from dams upstream are robbing the Snake River of its beaches.

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Nine BSU research projects cover everything from crawfish to conifers.
Board approves 3 new degrees

Boise State has added three more degrees to the selection it can offer students. Approved by the State Board of Education in June, the new degrees include an associate of applied science program in manufacturing technology and bachelor's and master's degrees in interdisciplinary studies.

Administered by the School of Vocational Technical Education, the two-year program in manufacturing technology will prepare students for work in manufacturing firms.

A major emphasis will be in quality control procedures, an area where many small companies can use more expertise, says BSU Executive Vice President Larry Selland.

In addition, the program will focus on the operation and maintenance of manufacturing equipment as well as management of the entire manufacturing process.

The two degrees in interdisciplinary studies will allow students to design their own programs from a mix of courses incorporating different colleges or academic fields. The result will be degrees tailored to a student's particular interests or career goals, explains Selland.

Students will be given enough flexibility to prepare for very specialized careers not offered through more general majors. For example, through the interdisciplinary studies route students can prepare for careers in fine arts management, environmental studies or health administration, all fields that BSU currently does not offer through degrees.

Students will not be allowed to pick a smorgasbord of courses and earn a degree, Selland cautions. Rather, students will present a carefully prepared curriculum for approval by a faculty committee.

Selland estimates that 100 students will enroll in the undergraduate program and another 25 in the master's.

University receives $1 million

After several years of working for other people, R. J. and Oressa McCaslin decided in 1938 to start their own lumber business. Until 1975 they carefully built a series of successful lumberyards in Idaho, Nevada, Oregon and Colorado.

Today, students at Boise State University are benefiting from that success.

The McCaslin estate has bequeathed almost $1 million to BSU, which will be invested, with the interest used to fund graduate assistantships for students in the College of Arts & Sciences studying geology, raptor biology, English and geophysics.

The gift is the largest ever given to BSU for scholarships.

"The generosity of these two outstanding citizens will benefit generations of deserving students," says BSU President John Keiser. "The McCaslin assistantships will honor their achievements forever."

Roy McCaslin, who died in 1979, was active in many Boise civic organizations, including the BSU Foundation and the Bronco Athletic Association. He was on the board of directors for Idaho First National Bank for 25 years.

Oressa McCaslin, a graduate of Southern Methodist, was a teacher prior to her marriage in 1928. She died in 1987.

About this issue

Located in a state with an abundance of natural resources, it is inevitable that Boise State play an important role in the debate over the use — and abuse — of those resources. In this issue, FOCUS features several BSU research projects that examine man's relationship to his natural surroundings.

East plays West

Before they played ball, they lunched at Boise State. BSU hosted the Olympic baseball teams from the U.S. and Taiwan before they played the first game in their national exhibition series. Above are head coaches Lin Chia-Hsiung, Taiwan, and Mark Marquess, U.S.
The game has begun in earnest. The players are familiar: Gov. Cecil Andrus, BSU President John Keiser, Boise's high technology companies, the State Board of Education, and the University of Idaho.

The objective is important. Providing educational services to the Treasure Valley's high technology companies, a fertile market that is key to the state's plans for economic development.

The playing pieces are controversial. A new College of Technology and technical building at Boise State. This is no ordinary game. It has rules, but exceptions are allowed for expediency. The playing field is even, but rough spots are common. There are referees, but they often turn into players. And players compete, but also cooperate.

The game begins. It is nearly 10 years ago. Keiser analyzes his new territory and immediately sees a "technology gap" in educational services provided by the university.

One solution is to focus BSU's efforts by establishing a high profile unit—a College of Technology. From this base, new programs can be added, research conducted and cooperative ventures with industry supported.

Enter the State Board of Education. The proposal draws a cautious reaction from the State Board when members first hear it in 1984. Soon after that, Keiser begins to lay the groundwork for eventual approval. Companies are interviewed and surveyed to determine their educational needs. The organizational structure of the college is refined. Community support is organized. New programs are planned.

The most obvious need, say local companies, is for more engineering courses in Boise. BSU's franchise only extends to sophomores-level courses.

Enter the University of Idaho. UI courses begin in Boise in the fall of 1987, but the UI remains nervous about BSU's proposed college and its long-range potential for delivering technical education. BSU wants to include the UI courses in a new technical building. Overt turf war does not break out, but there are occasional skirmishes.

Enter more players. Suddenly, the game takes on a new dimension. New players get involved in the winter of 1988. Boise-based Micron Technology, one of the country's largest computer chip manufacturers, says it is expanding its work force, but will locate its new plant in a state where access to engineering and technology programs is better.

The governor enters the game. Anxious to keep one of Idaho's few home-grown high tech companies in Boise, Andrus is aggressive and outspoken about his support for educational programs that could meet Micron's needs. Discretely, he works with BSU and the BSU Foundation to arrange a lease-purchase agreement and land exchange so the foundation can build a structure for lease to BSU. The move eventually gets caught in political crossfire as Republicans, most notably Speaker of the House Tom Boyd, who represents the district that includes the University of Idaho, criticize Andrus for conducting business in secret without consulting the Legislature.

Micron agrees to stay, and the governor insists that the college and building are important reasons why.

The game continues. Meanwhile, the State Board is ready to act on BSU's proposal to establish the College of Technology. Agreements are reached with the University of Idaho regarding who offers what engineering and where. Recognizing the need for the college in Idaho's overall economic development scheme, the board approves the unit in June with one dissenting vote: J. Ray Cox of Coeur d'Alene.

The game is not over, though. BSU has a college and will hire a dean by next July. But BSU still needs a building to house new programs and research labs.

Enter the BSU Foundation. Because funding through traditional state channels will take too long, the BSU Foundation agrees to construct a building on the land acquired through the trade. The building will be leased to the university for 10 years, then donated outright. The land swap attracts a swarm of reporters and politicians because it was arranged by a Democratic governor for a university in Boise. Some feel threatened by BSU's...
entry into technical programs; others are upset over procedures. But the swap is approved by the State Land Board.

Re-enter the State Board of Education. The BSUF lease-purchase arrangement still hasn't received the official blessing of the State Board, which needs to approve the terms of the lease, including an estimated $500,000 annual payment the university will make to the BSUF. The board will consider the issue at its September meeting. If approved, the BSUF will immediately begin construction.

Is the game over? Not yet. BSU has its College of Technology and will probably receive permission for a technology building this fall. The search for a new dean begins in a few months. But the objective — providing technical education to the region — has not yet been reached.

The game continues.

Boise State's College of Technology, which was approved by the State Board of Education in June, is a response to the technical education and training needs in the region, says BSU Executive Vice President Larry Selland.

"In order to help Idaho achieve a growing economy, we need to provide the tools and structure necessary for engineering and technical education in this region. This unit will focus our resources to create a better educational environment for industry," Selland explains.

In addition to the educational programs, the college will increase BSU's involvement in applied research, technical assistance to business, as well as incubator activities to help companies develop new products.

The college will include existing programs in vocational technical education, construction management, pre-engineering, and applied science.

Technology building in the works

If the State Board of Education approves the concept in September, Boise State will enter into a partnership with the BSU Foundation to construct a new technology building that will house a mix of academic and technical programs as well as research and business incubator facilities. Located in the residential neighborhood across University Drive from the current Vocational Technical School, the 50,000-square foot facility will cost $8 million. The BSUF, which will finance and construct the building, will lease it to the university for approximately $500,000 annually until the BSUF mortgage is paid. If construction begins this fall, the building is scheduled for use by the fall of 1989.
Dear Editor:

I read with great interest your article entitled “Territorial Instincts” in the spring issue of FOCUS. It disturbs me to know such a great state is in such turmoil over territory. Not being a native of Idaho, I may be construed as speaking out of place; however, I was fortunate enough to live in Boise for nine years, graduating from a local high school and Boise State University. I have also had the opportunity to travel extensively throughout the United States. Based on these facts, I must admit that Idaho is my choice of permanent residence.

I can understand how the geographical layout of the state would seem to lead to some alienation, especially for the northern reaches. But in my mind, each corner of Idaho has so much to offer, and this is the real problem. All residents are convinced that the sun shines brightest on their individual territories.

This attitude may be easily understood by those who have never ventured out of Idaho much farther than Spokane or Salt Lake City. For those of us removed from the vastness of public lands, rocky mountains, perpetual blue skies, bottomless lakes and four distinct seasons, these feelings of interstate conflict seem petty.

Two old sayings come to mind concerning this issue: You don’t realize what you have until it’s gone; and the grass is always greener ... etc. Based on my experience, the grass is greener, but over the entire state, not just in one corner. I can’t wait to get home.

Jim Hudson
Valdosta, Ga.

FOCUS invites readers to submit letters to the editor. Letters may be edited to fit available space. Please mail correspondence to FOCUS Editor, 1910 University Drive, Boise, ID 83725.

3 profs visit Canada

Boise State University’s Canadian connection continues to grow.

This summer three members of the BSU faculty visited our neighbor to the north to study specific issues in their field of expertise. They join more than 20 Boise State professors who have traveled to Canada as part of the university’s Canadian studies program.

Sociologist Richard Baker traveled to Toronto to study Polish immigrants in that city. Baker received a $5,000 faculty research grant from Canada’s federal government through the Canadian Embassy in Washington, D.C.

Arnold Panitch, social work, received a $1,500 grant from Quebec’s government office. Panitch collected data and conducted research on issues regarding that province’s immigration policies and population growth.

Music professor Madeleine Hsu was awarded a $4,785 faculty enrichment grant from the Canadian government to study 20th century Canadian music.
Dykstra co-authors physics book

An innovative textbook that introduces the new approach of using spreadsheet software as a tool for physics has been co-authored by a member of the BSU physics department.

Dewey Dykstra joined with Robert G. Fuller, visiting professor at the U.S. Air Force Academy, to write Wondering About Physics... Using Spreadsheets to Find Out. The book has been published by John Wiley & Sons, Inc.

According to Dykstra, the book is the first publication written strictly for use with spreadsheets on computers and is also the first Wiley book developed completely on computer diskettes.

The writing and production of the book and its instructor's guide involved the use of two different computer operating systems (Macintosh HFS and MS-DOS) on three brands of computer (Apple, Zenith and IBM) and eight pieces of software (two versions of Microsoft Word, SuperPaint, MacTerminal, Quattro, Excel, Lotus 1-2-3 and Ventura Publishing).

cold-drill wins honor

Boise State's 1987 issue of cold-drill has been named the best undergraduate literary magazine in the nation by the Columbia Scholastic Press Association.

The CSPA gave cold-drill its Gold Crown Award at the annual College Press Convention in New York City. The issue also won a First Place Medal and two All-Columbian awards in the CSPA contest.

Another organization, The Coordinating Council of Literary Magazines, gave cold-drill first prize and $300 in the 1987 Victoria Chen Haider Memorial College Literary Magazine Contest.

Student editors for the issue were Brian Kindall and Molly Reed. Adele Thomsen was graphics editor and Robert Papinchak was the faculty editor.

Med schools accept 6

Six Boise State University students have been chosen for advanced study at medical schools.

• Keri Erland of Boise has been accepted by the University of Washington.
• Torrey Nash of Newberg, Ore., has been accepted into the University of Oregon.
• Robert O. Woodbury of Boise was accepted by the Uniformed Services University of the Health Sciences S. Edward Herbert School of Medicine in Bethesda, Md.
• Ester Trueblood of Boise was accepted to veterinary school at Washington State University.
• Fred Rhead of Soda Springs was accepted by Western States Chiropractic College in Oregon.
• Connie Lavertu was accepted by the University of Saskatchewan in Canada.

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Trio selected to teach in Europe

Three Boise State University professors have been selected for faculty positions in England and France with the Northwest Interinstitutional Council on Studies Abroad.

Marcia Wicklow-Howard, chair of BSU's biology department, will lead the 1989 spring term in London and teach two courses on Charles Darwin's writings and the history of botanic and zoological gardens in Britain.

Driek Zirinsky, English, will teach during the 1989 London winter term. One course will examine the journals and letters of American novelists as they study England and its traditions. Her second course will investigate the British educational system of the 19th century, comparing the reformed British system with contemporary American schools.

History professor Michael Zirinsky will spend the spring term in Avignon, France, teaching about the history of relations between the West and the Islamic world. His second class will examine modern French history.

The NICSA consortium sponsors study programs in five European cities: Bath and London, England; Avignon, France; Cologne, Germany; and Siena, Italy. Professors compete with faculty from nine other institutions of higher education including the universities of Washington, Oregon and Alaska for the one American faculty position available at each site each term.

Discover BSU events scheduled in October

Students interested in attending Boise State University next year are invited to attend the university's Discover BSU events Oct. 22.

The program will include explanations of financial aid, information about campus life and a campus tour. Evening events include a barbecue and the Bronco football game against the University of Montana.

A small registration fee will cover the costs of the barbecue, game and commemorative T-shirt. Participants are asked to register in advance with BSU Admissions Counseling, 1910 University Drive, Boise, ID 83725.

H.S. scholars convened

Twenty outstanding high school juniors from across Idaho got a head start on their college educations this summer as the first participants in the Boise State University Hemingway Scholars Program.

The students took college-level courses during the BSU summer session and participated in several other activities, including visits to Boise art galleries, attendance at an Idaho Shakespeare Festival production, field trips to explore the geology of the Boise Front and Snake River Plain and other organized cultural and social functions.

Hispanic classes set

Help is on the way for Spanish-speaking entrepreneurs in the Treasure Valley.

Through the cooperation of area vocational, business, educational and Hispanic agencies, the Idaho Small Business Development Center (ISBDC) now offers an 18-module Program for Acquiring Competence in Entrepreneurship (PACE) to the area's Spanish-speaking residents.

According to Jim Lanham, ISBDC director of training/business, the courses are the "first in the nation to be targeted specifically to the Hispanic community."
FOCUS receives national award

FOCUS has been rated among the best alumni magazines in the nation in a contest sponsored by the Council for the Advancement and Support of Education (CASE), a Washington, D.C., professional organization that represents 3,200 schools.

CASE awarded FOCUS a silver medal, placing it among the top 22 alumni magazines in the United States. Boise State and Stanford were the only winners from the West among the 91 magazines that entered the contest.

FOCUS is published quarterly by the Office of University Relations and is distributed to 42,000 alumni, students, staff and friends of BSU.

“We were pleased to receive the award. It is very rewarding to know that what BSU is doing is recognized on a national level . . . it puts us in some very distinguished company,” says editor Larry Burke.

Most of the CASE winners were from private schools in the East, such as Brown, Columbia, Harvard, Duke and MIT.

Last spring FOCUS was named the best large circulation alumni magazine in the Northwest region of CASE and writer-photographer Glenn Oakley won a gold medal for writing excellence.

BSU received two other medals in the national CASE competition: a silver for photographer Chuck Scheer’s work in the admissions booklet and a bronze for improvement of BSU’s fund-raising and communication programs over the past three years. During that period BSU has switched FOCUS from a newspaper to a magazine format, moved KBSU to National Public Radio status, and established the public cable channel Connection 27 on campus.

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Honors give boost to College of Business

As Boise State's College of Business continues to receive recognition for its increasing levels of excellence in teaching, research and service, the college's students are also doing their part to enhance its reputation.

Among the college's accomplishments during the 1987-88 academic year were several honors for individual students and student groups. Among those points of academic excellence were the following:

• The BSU chapter of the Beta Alpha Psi accounting fraternity received superior status. Of 175 chapters nationwide, only an estimated one-fourth receive such recognition.

• BSU students consistently exceeded the national average pass rate on the uniform CPA exam.

• For the second year, BSU's team won its division in the International Business Policy Simulation competition held in Reno, Nev.

• In November 1987 BSU student Nancy Sewell was recognized by the American Institute of Certified Public Accountants for passing the CPA exam with high distinction. Only five such awards are given nationally.

As important evidence of its quality, the college is nationally accredited by the American Assembly of Collegiate Schools of Business. Only 230 of the nation's business schools — or about one in five — have achieved this important distinction, which signifies that the college meets and maintains nationally established standards of educational excellence for its 3,200 undergraduate majors and its 350 graduate students.

From a service standpoint, the College of Business has helped advance Idaho's economy by extending its capabilities into the broader community through non-credit professional development and training programs, research, technical assistance and publications such as Idaho's Economy, a quarterly journal that provides Idaho decision makers and citizens with information on a variety of topics bearing on the state's economic performance.

The primary service activities are organized within the college's Idaho Business and Economic Development Center (IBEDC), the Center for Management Development (CMD) and the Office of Research and External Relations.
Canyon Division offers assistance

Economic woes are forcing many farmers and their families from the fields and into the work force, and the Boise State University Vocational Technical Canyon County Division offers programs to make the transition a little easier.

Charles "Chuck" Tillman, manager of the Canyon County Division, says since the center opened in 1987, it has seen more and more farmers and their families take advantage of the training offered in the nine programs and many classes at the facility.

"The retraining offered in the evening programs involves some displaced farmers as do the full-time programs," Tillman says. "There is definitely a need for retraining because of the agricultural economy. You read a lot about bankruptcies and problems and I can tell you, it's really happening."

Tillman says no figures are available on just how many displaced farm workers enroll at the center because information on students occupations isn't kept on record. He says, however, that many of the farm workers who are known to have enrolled take an interest in the agricultural equipment technology and professional truck driving programs.

"We're finding more farm wives are having to go to work," he says. He estimates that 10-20 percent of those enrolled in the Center for New Directions programs are wives of farmers who needed training for the workplace.

Two conferences scheduled in fall

This fall BSU will host two major academic conferences, one in public affairs and the other in education.

The sixth annual Frank Church Public Affairs Conference will feature a mix of scholars and political figures speaking on the topic "Prospects for Peace."

The Rev. Forrester Church, son of the late U.S. senator, will deliver the opening address Sept. 29. Author of 12 books and a column in the Chicago Tribune, he is senior minister at All Souls Church in New York City.

The other major speaker is Arthur M. Schlesinger, Pulitzer Prize-winning historian, author and adviser to President John Kennedy. Schlesinger now teaches at City University of New York. He will speak the evening of Sept. 30.

Day sessions are planned for academic presentations and workshops for teachers. The conference is sponsored by the School of Social Sciences and Public Affairs and the Frank Church Chair of Public Affairs.

The second annual symposium on teaching will address teaching and educational partnerships. Sponsored by U.S. West Communications and the College of Education, the Oct. 14-15 conference will feature addresses by Ernest Boyer, president of the Carnegie Foundation for the Advancement of Teaching, and Peter Stillman, an editor with Heinemann Education Books, a New Hampshire publisher.

Other sessions will include local educators and business leaders.

Both conferences are free to the public.

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Archive to open

Idaho writers — established as well as struggling authors — will have their works preserved and cataloged under a new project sponsored by BSU's Hemingway Western Studies Center.

The Idaho Writers' Archive will compile a data base of Idaho writers and collect and catalog books, magazines, manuscripts, and other works by these authors. The works will be cataloged and stored in the BSU Library and will be available to literary scholars.

The program's coordinator, English professor Charles Guilford, says the approaching Idaho Centennial underlines the role that literature has played in shaping the state's sense of identity.

"We believe that an Idaho Writers' Archive is a suitable way of consolidating this heritage as we move forward into our next century," he says.

Guilford says because writers frequently work in obscurity during their lifetimes — only to be recognized after their deaths — much of their work is lost. The archive, he says, will attempt to keep track of current writers and collect as much writing-related material as possible from past authors.

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Hazardous waste program slated

What does the future hold for states like Idaho as hazardous waste disposal continues to be a problem?

As part of the GTE Foundation Lectureship Program, four experts on hazardous waste will address this controversial topic at Boise State University during the 1988-89 academic year. They are:

- Fred Hansen, director of the Oregon Department of Environmental Quality, who will address the subject from a regional point of view in late September.
- Kirsten Oldenburg, an analyst with the U.S. Congress Office of Technology Assessment (OTA) and co-author of the article "From Facility Siting to Waste Reduction," who will speak Nov. 15. Oldenburg has been with the OTA for more than four years and is currently involved in research topics on the Superfund program and solid wastes.
- William Ross, Seattle, who will speak in January, focusing on public response to industry and agency programs from the perspective of a community activist.
- Jack Peterson, chairman of the Idaho AMAS brings top honor

Boise State has been selected one of two universities nationally to be recognized for programs that integrate disabled students into the mainstream of campus life.

The award came from the American Association of State Colleges and Universities (AASCU), the National Organization on Disability and J.C. Penney Company.

The other winner was Emporia State in Kansas.

BSU was recognized for its Alternative Mobility Adventure Seekers (AMAS) program that promotes recreation, health, fitness and social activities for the physically disabled in the region. More than 300 people have taken part in AMAS activities, including whitewater rafting, sailing, scuba diving, skiing and horseback riding.

AMAS is staffed mostly by disabled students as part of BSU’s Outdoor Adventure program.

All universities are required by law to make their campuses accessible to the disabled. The AASCU award was established to recognize institutions that have gone beyond the requirements of the law and have been innovative in their approach to serving the disabled.

Emergency Response Commission, policy analyst, economist and author in natural resource economics and environmental policy development, who will analyze the issues from Idaho’s perspective in April.

The key purpose of the lectureship program is to promote interaction between the nation’s college campuses and their local communities in discussion of issues related to science, technology and human values, says Martha Kramer of GTE.

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AMAS is...
MANAGEMENT


PSYCHOLOGY

Harry Steger was honored in April as an outstanding faculty member in the College of Education, named to the honor by a selection committee of faculty, staff and students.

LIBRARY SCIENCE

Marjorie Fairchild, emeritus faculty, was honored in May by the American Association of University Women as the Educational Foundation Program's 1988 Name Grant Honoree.

POLITICAL SCIENCE

Gary Moncrief co-authored "Explaining Pork Barrel Success in the North Carolina Legislature," which was accepted for publication in the August issue of The Legislative Studies Quarterly.

Gregory Raymond presented his co-authored research paper, "Polarity Transformation and Changes in Alliance Norms," at the International Society of Political Psychology annual conference in New York during July. Raymond will be on sabbatical leave during fall semester 1988, continuing his research on international alliances in The Hague, Netherlands, and in Geneva, Switzerland.

Raymond's article "The Long Cycle of Global War" has been accepted by the International Peace Research Institute in Oslo, Norway, for publication in The Journal of Peace Research. He has been invited to speak at a conference in London on the topic "Comparative Research on Mediation and Conciliation Processes."

Steven Sallie presented his research paper, "Dependency and Government Repression Across the African States," at the annual meeting of the International Society for the Comparative Study of Civilizations in Hampton, N.Y. Sallie also attended "Focus on the Pacific Rim," an international conference held at the University of British Columbia during June.

John Fremuth served as editor of the report compiled by a special advisory group to Congressman Larry Craig on the management of the Sawtooth region of Idaho.

Willard Overgaard was honored in April as an outstanding faculty member in the School of Social Sciences and Public Affairs, named to the honor by a selection committee of faculty, staff and students.

Department secretary Patricia Durie has retired after 18 years at the university.

MARKETING & FINANCE

Douglas Lincoln was elected 1988-89 president-elect and 1989 conference co-chairman for the Western Marketing Educators Association.

Lincoln and Earl Naumann presented "A Systems Theory Approach to Industrial Marketing Research" at the Southwest Marketing Association conference in San Antonio. The paper was selected as the outstanding competitive paper out of more than 100 papers presented.

Stan Scott presented a paper at the Southern Marketing Association conference. He has also addressed several other regional conference audiences.

ECONOMICS

Peter Lichtenstein was honored in April as an outstanding faculty member in the College of Business, named to the honor by a selection committee of faculty, staff and students. He spent the summer teaching at Nankai University in China.

PAVILION

Executive director Dexter King has been selected as the head of the board of regents for a school that offers instruction for managers of large stadiums, arenas and other public facilities. The school is sponsored by the International Association of Auditorium Managers (IAAM) and located in Wheeling, W.Va. This year 114 students enrolled in the one-week program to study box office management, booking, budgets, labor relations, crew management and other topics.

HISTORY

BSU history students Sharon Brown, Daniel Greer, Kathy Hodges, Jim Mosley, Deborah Roberts and professor Todd Shattle were honored in April at a U.S. Bureau of Land Management ceremony for outstanding service. The team received the BLM's National Volunteer Service Award for their research monograph "Prospects: Land-Use in the Snake River Birds of Prey Area, 1800-1987."

Shattle also received a BLM outstanding service award for coordinating the BSU public history internship program. Since 1985, more than 60 interns have worked as historical researchers in public agencies.

Shattle and Dave Kennedy received a historic preservation planning grant to study reclamation in the vicinity of Jerome. Another grant from the Idaho Humanities Council is funding a history of the state constitution project.

Michael Zirinsky spoke on "Teaching the Middle East in Isolation" at a seminar in May at the University of Washington.

COMMUNICATION

Ed McLuskie presented his paper "Why did Lazarfeld Become Silent on Critical Research?" at Oesterreichische Gesellschaft fur Publizistik- und Kommunikationswissenschaft in Vienna during May, communication workshops for AT&T employees during January and April.

Robert Boren conducted a workshop on technical presentations for Arco Petroleum in Lafayette, La., a general communication workshop as part of the Strategies for Success workshop series, and presented "Leadership and Communication" to Region 5 of the U.S. Forest Service during March and April.

Suzanne McCorkle hosted the high school speech and Lincoln-Douglas debate tournament at BSU during February.

Dan Morris successfully defended his dissertation "The Anvil Writers," at the University of Missouri School of Journalism in March. Morris was elected secretary of the Idaho Press Club at its annual meeting in Sun Valley during April.

ACCOUNTING

David Nix has had papers accepted for publication in the Practical Accountant and the Journal of Education for Business. He recently presented his paper "Why CPA Exam Rates Vary Among Colleges and Universities" at the American Accountant Association meeting in St. Louis.

Bill Leiten addressed the American Institute of Certified Public Accountants.

ART

John Taye exhibited a wood sculpture in the 1987 Fine Arts Competition and Exhibition, an international juried show at the Museum of Church History and Art in Salt
Lake City. The sculpture was purchased by the museum after the show. Taya was accepted in Northwest Crafts 88, a juried exhibition at the Tacoma Art Museum. He also was elected a member of a national sculpture society in January.

SOCIOLOGY, ANTHROPOLOGY & CRIMINAL JUSTICE

Tony Walsh's book, Understanding, Assessing & Counseling the Criminal Justice Client, was recently published by Brooks/Cole Publishing.

Walsh and Bob Corbin co-authored the article "The U.S. Supreme Court and Value Legitimacy: An Experimental Approach With Older Americans," contained in a recent issue of Sociological Inquiry.

NURSING

Faith Peterson has been appointed by Gov. Cecil Andrus to the Idaho Board of Nursing. She will serve on the board until 1990.

HEALTH SCIENCE

Carol Seddon was honored in April as an outstanding faculty member in the College of Health Science, named to the honor by a selection committee of faculty, staff and students.

JoAnn T. Vahey was awarded a distinguished service plaque for contributions to the four-year Robert Wood Johnson Grant on "Hospital Initiative in Long-term Care" at St. Luke's Regional Medical Center.

Vahey recently spoke at a statewide meeting of the State Office on Aging on "The Use of Telecommunication to Provide Homemaker Training in Idaho." The project was implemented during 1987 through a special project grant funded by the Department of Health and Human Services.

BIOLOGY

Dorothy Douglas was honored in April as an outstanding faculty member in the College of Arts & Sciences, named to the honor by a selection committee of faculty, staff and students.

THEATRE ARTS

Stephen Busa directed the March production of Kiss Me Kate, in the Morrison Center. He also supervised the February Theatre Arts Festival for area high school students and gave a scene painting workshop. The department's spring production, The Lady's Not For Burning, directed by Robert Ericson, was set-designed by Busa.

Ericson and Phoebe Lundy, history, are co-creators of a new interdisciplinary history course entitled "Film in Context: Art and Ideology in Early Soviet Cinema." The course has gained grant support and will be offered next semester.

In April, William Shankweiler served as an evaluator of the fine arts programs at Eastern Washington University for the Northwest Association of Schools and Colleges. Shankweiler served as master of ceremonies for Boise Music Week's "Afternoon in the Park" this spring.

The Miss Firecracker Contest, directed by Shankweiler, was set-designed by Phillips Atkinson. Atkinson served as supervisor for set construction for Kiss Me, Kate. His original play, Leapfrog Through Space and Time, was entered in the American College Theatre Festival in Laramie, Wyo. He led several workshops at the festival and coached two SU students who competed for the Irene Ryan acting awards.

Charles Lauberbach has been granted sabbatical leave for fall semester 1988 to pursue research on historical theater in Idaho. He served as a host for KAIU-TV's Festival '88, the annual PBS fund drive, during March. Lauberbach presented "Acting -- The Natural Art" to the Mesa Club of Boise during March.

Rod Cebellos is continuing his work as artistic director of the Idaho Shakespeare Festival, and supervising all aspects of production for the summer season, including direction of Titus Andronicus. Cebellos directed the ISF theatre arts department production of What the Butler Saw in June.

COMPUTER SYSTEMS & DECISION SCIENCES

Robert Minch co-authored "A Decision Support System for Identifying a Generic Data Model of the Firm," to be presented at the annual national meeting of The Institute of Management Sciences' Operations Research Society of America. He also completed a literature review regarding expert systems applications in banking funded by Moore Financial Group.

Patrick Shannon is serving as the current president of the Western Decision Sciences Institute. Shannon, Minch and Brian McGrath, economics, recently completed a motor carrier study.

Shummen and Michael Bixby have completed a study for the Idaho Transportation Department relating to Idaho Compulsory Vehicle Liability Insurance.

Wita Wojtkowski presented "Fourth Generation Technology as a Cornerstone of Information Management" for the International Academy of Information Management. She has also published papers for International Business Schools and participated in the Computer Users Group annual conference.

Susan Bredesen is serving on the Idaho State Historical Records Advisory Board.

SCHOOL OF VOCATIONAL TECHNICAL EDUCATION

Janet Carlton was honored in April as an outstanding faculty member in the School of Vocational Technical Education, named to the honor by a selection committee of faculty, staff and students.

HEALTH, PHYSICAL EDUCATION & RECREATION

Sherrl Button presented "Coed Weight Training at the Secondary Level" at the Northwest district conference of the American Association of Health, Physical Education, Recreation and Dance (AAHPERD) held in Pullman, Wash., during March and "A Model for Centralized Advising" at the national AAHPERD meeting in Kansas City, Mo., in April.

Ginger Fahlman presented "Self-Report of Students' Cognition and Time on Task During P.E. Instruction" at the national AAHPERD meeting.

Butten and Werner Hoeger presented "Relationship Among Four Measures of Flexibility Measurement" at the Northwest district AAHPERD. Hoeger has published "Comparison of Biologic Compensation for Skin Thickness and Hydrostatic Weighing at Estimated Residual Lung Volume and Total Lung Capacity" in the IAHPERD Journal and Principles and Labs for Physical Fitness and Wellness by Morton Publishing Co.

Hoeger also made several other presentations, including "Development of a Coronary Heart Disease Risk Profile" at both the IAHPERD and Northwest district AAHPERD meetings; "Fitness Program for the Elderly," at the Western Conference for the Physical Education Society in Reno, Nev.; "Lifestyle, Physical Fitness and Wellness: A Personalized Program;" Northwest district AAHPERD: "Set-Point Theory: Is There a Weight Regulating Mechanism?" to the Ada County Medical Society; and "Fitness Testing for the Aged," at the national AAHPERD meeting.

Randy Miller was elected vice-president of recreation for the Northwest district AAHPERD.

Out during May.

Knoxville, Tenn., during May, during the AAHPERD conference; "Coaches," and "Model Curriculums Including AAHPERD, the Awards Program to Physical Education," at the AAHPERD conference; and "An Evaluation of the Model of Sport Persistence" to the North American Society for Psychology of Sport in Knoxville, Tenn., during June.


Ross Vaughn presented "Trajectory of Tennis Balls: Implications for Player Positioning," at Northwest district AAHPERD.


Steve Wallace presented "Volleyball Leadup Games" at IAHPERD in October.

TEACHER EDUCATION

Dan Spitzer, director of the instructional technology program, has published a four-part series, "Performance Improvement Ideas," in Performance and Instruction Journal, and articles "Strategic Thinking: The Key to Training Success" and "Training Technology," in Educational Technology.

This spring Spitzer presented three papers at the National Society for Performance and Instruction annual conference in Washington, D.C. He also spoke on "What Price a Human Life?" at the Holocaust Commemorative, "How to Make Your Boss More Productive" to the Idaho Association of Educational Office Personnel, and "The Art of Managing People" to the Clinical Laboratory Management Association.

SOCIAL WORK

Dan Huff's and Dave Johnson's co-authored report "The New Vagabonds? Homelessness Outside the Megalopolis" was accepted for presentation at the National Institute on Social Work and Human Services in Rural Areas meeting during July.

Arnold Panitch received a $1,500 grant from Quebec's government. Panitch collected data and conducted research on issues regarding that province's immigration policies.

ENGLISH

Tom Trusky is the fourth recipient of the BSU Library Faculty Award. The award is presented each year to a faculty member in recognition of that person's contribution to the development and use of the library. This summer Trusky traveled to Paris for a presentation on silent film actress/director Nell Shipman at the "Voyage au pays du muet," a silent film festival and conference held at the Musee d'Orsay.

Dr. Joel Zirinsky has been appointed as a consultant to the Commission on Supervision and Curriculum Development in the English Language Arts with the National Council of Teachers of English (NCTE). NCTE is a professional organization for teachers and supervisors of English at all levels of education. Its aim is to improve the teaching of English and the language arts in the nation's schools and colleges.

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Lured by the Bright Lights

By Marie Russell

They don't have those glittering All-American Hollywood smiles. But as actors, stunt men and directors working their way onto the silver screens and in front of the footlights, they all share two common traits. A love for theatre and degrees from Boise State University.

Four graduates — Mike Hoffman, Jay Pickett, Paul Grant and Scott Sproule — work different angles of the theatrical world with different degrees of success. And each is applying a twist to the old Hollywood moniker: It's not who you know, but what you know.

Hoffman goes his own direction

Mike Hoffman's mother had never talked to her son like this before. Dorothy Hoffman was playing the interviewer for FOCUS magazine, asking her son, who has become a semi-famous filmmaker, questions normally would not ask. Not personal, probing questions, but just... questions.

"Do you like what you do?" she asked her son, a 1979 graduate of Boise State University, "Are you satisfied, I mean are you pleased with . . ."

"I'm pleased," he replied, answering her question before she finished it, "I'm being more able to be pleased by accepting it all as a process, so I don't feel like I have to be the greatest filmmaker in the world right now, because I'm not. I'm learning and now that I've kind of accepted it as a learning process instead of wanting to be Boy Wonder, I'm much happier."

Maybe Hoffman hasn't become Boy Wonder, but he is well on his way to becoming a known director and filmmaker. He just finished shooting Sisters for MGM. His next projects include writing a screenplay about a black Union soldier who is court-martialed during the Civil War and in October he will head to Florida to try his hand at acting. By his own admission, his last movie, Promised Land, which he wrote and directed, did well.

"It did quite well, it got sort of mixed reviews, some people didn't like it a lot and others did not like it very much at all," he says jokingly. "It did well in Seattle and Los Angeles and San Francisco and on the East Coast."

Promised Land was shot in Utah, starring Keifer Sutherland and Meg Ryan. The movie was panned by some and hailed by others. But Hoffman never saw the film as fodder for critics.

"It was a project that I was working on for a long time. It was very close to me, about my home, in some ways the family growing up in a small town in Idaho and about expectations and frustrations and violence," he says. "I personally am quite happy with it and that's a big step for me because one of the things that's very painful about this business is you end up working very hard on something, then exposing yourself to criticism."

"If people don't like it, you sort of think, 'Gosh, did I do this wrong?' But you gradually learn it isn't really about right and wrong, it's about taste, about choices."

For Hoffman, directing and filmmaking as a career was just such a choice.
He pursued a theater major at BSU and after graduating, continued his studies at Oxford University in England as a Rhodes scholar. When he graduated from high school, he declared his goals were “to win Academy Awards.”

And he just well might. Although long out of college, Hoffman hasn’t stopped trying or learning.

“I’m learning that one of the important things is to do the work, do a movie, go on, do another movie, learn from it, live with it. It’s never perfect,” he says. “I mean it’s a very difficult situation coordinating so many elements and there’s so much that goes on on a set and so much that goes wrong every day.

“It’s amazing that any movie even gets finished, let alone turns out well. There’s an awful lot of people and a lot of luck involved with it, you know, with any great movie. I’m just gradually learning to take it all more in stride, both the good movies and the difficult movies and to learn from both the difficult days and the less difficult days. It’s the work that’s the important thing, and doing material that you’re committed to so you can preserve the kind of integrity that you think is essential to any sort of happiness.”

While many careers in the world rely on knowledge and skill, Hoffman says he’s found the key to success as a director isn’t anything found in books: it’s instinct.

“I think the director’s first job is to tell the story; what the story is and to know each scene’s importance to the narrative,” he says. “Each scene should be there for a reason. It’s a piece of information. That is an instinctive, very tough part of the work.”

Hoffman, who grew up in Payette, now lives in London and doesn’t make it back to Idaho much anymore. While his energies are focused on making movies, Hoffman hasn’t forgotten what it was like as a struggling scriptwriter. He’s part of an institute that holds a national screenwriting competition for young British writers under 30. The six best scripts are chosen and industry professionals band together to help the writers see what their script could become. In their fifth year the non-profit workshops are “working pretty well.”

Although considering a move to Los Angeles so he can be closer to Idaho, Hoffman has resisted the glamour and glitz of the American movie mecca. He now lives in Los Angeles with three others and a host of sorts who “are there a lot, but don’t live there.” They all write and work on movies, and Hoffman says the camaraderie not only provides support but helps the group maintain perspectives on filmmaking as an art — not a business.

“We very purposefully don’t live in Hollywood to try to free ourselves from the pressures that go with Hollywood — the pressure to become part of the system. A goal that all of us really have is to stay free of that,” he says, “and to keep doing things we feel are important, rather than doing things that someone else feels are important. There are things that we should be doing, things that would be more lucrative, things that would make us more money, but we’re just trying very hard to encourage each other not to sell out.”

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**Pickett: Stardom comes slowly**

Actor Jay Pickett is not following the Lana Turner trail to fame and fortune.

Mind you, it would be a wonderful Cinderella story if he could: Idaho farm boy trades in horse and cattle for Tinsel Town and becomes a big star. But Pickett wasn’t discovered on a soda fountain stool; he’s making his name the way most do in Hollywood: He’s starting out slowly, hitting audition after audition, hoping his skills and luck will bring on the roles.

“I'm a long ways from where I want to be,” the 1984 BSU graduate says, leaning back in a chair during a recent interview in Boise. “I want to make a good solid living at acting. I don’t need to be rich or famous as long as I make a good living.”

As a college student majoring in theater, Pickett knew he had picked a risky career to pursue. He came to BSU to play football, following in the footsteps of older brother Dee Pickett, who was a star quarterback for the Broncos and later went on to become the reigning national champion cowboy on the professional rodeo circuit. Jay Pickett first sought a communication major, but found the draw of the stage and lights too luring.

“I made up my mind a long time ago that I wanted to be an actor,” he says, admitting that at the time reactions to his choice were “not very good.”

“I kept it from my parents for a long time,” he says.

After graduation, Pickett left his family’s ranch near Caldwell and headed for Los Angeles. He enrolled at UCLA, receiving a master’s degree in theater.

“You know, I’ve been thinking about this a lot,” he says. “When I went to UCLa, there were other graduate students that had gone to other schools and came from all over the United States. But I compared what I had learned at BSU to their educations and I was equally or more prepared than they were.”

Much of Pickett’s theatrical knowledge came from his leading roles in BSU productions of The Importance of Being Earnest, She Stoops to Conquer, Joan of Lorraine and Night Watch.

So far, Pickett’s Hollywood career hasn’t seen quite as many leading roles. To date, Pickett had a major role as a disturbed army deserter on television’s China Beach, was a guest star on the Rags to Riches television series, and had a featured role in a low-budget Animal House-type movie that shall remain nameless.

Not bad for a year of work. Especially when you consider that for every open role, there are at least 200 other actors standing in line. And that’s only after the casting directors have selected them from thousands of photos.

“I’ve got to be remembered before I can be forgotten,” he says, but refuses to think about what might happen if he doesn’t succeed.

“I don’t allow myself to talk about that. My biggest fear is not succeeding and then I’d have to move away to do something else,” he says. “When I moved down there, I said ‘This could take me 10 years,’ I wasn’t expecting things to happen overnight. The real actors will eventually get their shot.”
Grant: Singin’ his way to fame

Paul Grant laughs about it now. He recalls the time when he had the biggest shot of his life — to audition before composer/lyricist Sammy John and the director of the Santa Barbara Musical Theatre — and having only memorized the song the day before, forgot the words and knocked over several pictures that adorned the composer’s grand piano.

And it got worse, Grant says. Because the composer started asking him if he knew this song, or that song, or even this one until Grant, who knew none of them, felt like a fool standing in the man’s living room.

“Not all my experiences have been positive,” the 28-year-old singer/actor says. “That was not a good experience.”

Grant, who left BSU in 1984 as Paul Grant Totten, has seen better days in Hollywood. And although he’s finding the going a little bit rough, he says he has amassed enough experiences to last a lifetime.

Perhaps the most shining moment thus far for Grant was his appearance in director John Huston’s final film, The Dead. “I was the only non-Irish person in The Dead, he says. “I had a speaking part and spent eight weeks filming. It was a fantastic experience. It was great working with Huston, who was one of America’s greatest directors. It was very interesting to watch him work and I’ll never get to work with another director like him.”

Grant says he appeared frequently in the movie, although the scene he spoke in ended up on the cutting room floor.

But that’s all right for Grant; it’s not the silver screen he’s interested in, but the stage.

“I haven’t pursued film or movies because my first love is musical theater,” he says. “I find making films fairly tedious; the theater is a much more creative medium and it is more immediate. Grant starred in several productions at Boise State, including the part of “Freddy” in My Fair Lady, which was the inaugural production at the Morrison Center.

“I’ve been in 15 stage productions in two years,” he says. “There are fewer roles for musical theater, but so far it has been good for me. In the future, I’d like to try to divide my time between the stage and movie roles.”

Sproule: From skis to stunts

You could call Scott Sproule a utility player.

On the movie set, he’s acted, been a stunt man, created special effects, and done grip work. He knows both sides of the set — in front of the camera and behind. He doesn’t specialize — he likes doing everything.

That’s exactly what Sproule was like when he attended Boise State University 10 years ago.

“I majored in psychology because that’s the subject that held my interest, but I took a lot of business and art. I enjoyed going to school,” the 1979 BSU graduate says. “I tried to be undeclared, but when I was a senior they told me I had to choose a major and most of my classes were in psychology so I chose that.”

Sproule probably enjoyed college so much because he did it one semester at a time, taking the spring semesters off to ski. But Sproule was no ski bum; shushing down the slopes is how he made his living.

“I grew up skiing,” says the Ketchum resident, who spent 12 years as a professional skier. “It’s a real addiction when you want to do it and I decided I wanted to try to make money as a skier.”

By pestering local photographers, Sproule became a model for still pictures, flaunting skiwear and other clothes. That led to parts in ski movies, which he started on a local level and eventually led to working for the famed Warren Miller.

“The photographers are always looking for somebody who can ski, but it’s a different kind of skiing. Your have to ski for the camera. It may be just one turn or three, but you have to make it look exciting and real. It’s a real challenge and you have to work at it,” he says.

It was one of those ski movies that opened the door for Sproule’s work as a stunt man. Shooting the movie Runaway Train in Alaska, the cold and snow reminded one stunt coordinator of his work with Sproule in Sun Valley. Shortly thereafter, Sproule was doing stunts in Alaska.

“Stunt acting is something you sort of pick up,” he says. “They’ll teach you how to fight and drive. You learn some tricks and then go out and practice.”

Sproule’s favorite work as a stunt person was in Cherry 2000, a movie never released in the U.S.

“It was an incredible project, with the action and the things we could do. We were working all over Nevada and Death Valley,” he says. “But I saw the movie while I was in Mexico; it’s a really crummy movie.”

His diverse work in Hollywood has given Sproule the opportunity to work for directors Steven Spielberg and Bob Zemeckis. He recently completed work on Spielberg’s Who Framed Roger Rabbit? and just returned from Mexico where he was doing special effects and grip work on a Walt Disney film Teeny Weenies — Grounded.

His other work includes Masters of the Universe, as a double for Tom Hanks in Dragnet, and television shows, Deadly Triangle and Swan Song.

His work takes him away from his home in Ketchum, where he would like to continue living. In the future, he says, he’d like to see more work come home with him.
Foundation News

Merchants Donate To BSU

The Broadway Shopping Center merchants sponsored BSU Appreciation Days in April to recognize and show their appreciation for business from the campus community. The merchants donated $500 to BSU’s general scholarship fund along with various prizes and gift certificates. Ken Miller, Broadway Center Albertson’s manager and Merchants Association president, presented the scholarship fund check to Ben E. Hancock, Jr., executive director of the BSU Foundation.

Micron Donates 2,000 Shares

Ward Parkinson, vice chairman of Micron Technology in Boise, has donated 2,000 shares of the company’s stock to be used for scholarships at Boise State. The gift establishes the Ward Parkinson Scholarship Fund in Technology, which will provide scholarships for students working in the Simplot/Micron Technology Center video transmission program.

Hancock Receives Fulbright

Boise State University Director of Development Ben Hancock spent the summer among the bagpipes and kilts in Scotland on a 1988 Fulbright Fellowship under the United States-United Kingdom Academic Administrators Exchange Program. From May through July, Hancock evaluated established institutional development programs at the University of Edinburgh. He has advancement experience at Pennsylvania State University, Maryville College and James Madison University and is completing his doctorate at the University of Virginia. His dissertation topic concerns private philanthropy for higher education in the United Kingdom.

Funded by the Fulbright Scholar Program and the British Council, the fellowships give both American and British campus administrators the chance to study and work abroad.

Giving Notes

The Willard M. Overgaard Scholarship Fund has been established by the political science department to honor Overgaard’s 15 years of service as its chairman. Contributions to the Overgaard endowed scholarship may be made to the BSU Foundation, 1910 University Dr., Boise, ID 83725.

This year’s BSU graduates have established a permanent endowed scholarship. The fund will serve as a fitting reminder of the generosity and caring of the Class of 1988 as well as assist deserving BSU students in the future.

Contributions to the Harry K. Fritchman Biology Scholarship now total $8,900. Fritchman retired this year after teaching 34 years at Boise State.

Recipients of Lynne Fereday/Domingo Ansotegui Scholarships for study in San Sebastian, Spain, during the 1988-89 academic year are: David A. Gerggren, Jennifer J. Braun and Todd A. Dehlin, all Boise, and Rosemarie Schwarzenberger of Roberts.

BSUF Receives Estate Gifts

The Boise State University Foundation recently received three estate gifts for scholarships and loans. The first gift, $74,777 from the estate of John and Bertha Case, will be used to provide marching band and athletic scholarships.

The second gift, $35,000, is from the Edna M. Allen Estate, and of that amount, $25,000 will establish an endowed scholarship in her name. The remaining $10,000 will be used for the Gresner-Cecil Memorial Student Loan Fund.

The third gift, $5,000, comes from the estate of Signe B. Baird, the wife of the late Ed Baird. Ed Baird, founder of Baird’s Cleaners and a legislator, was a leader for Boise Junior College’s transition to a four-year college and a university.

Memorial Gifts Important

Memorial gifts in the form of contributions to the Boise State University Foundation have been recognized as a thoughtful way to honor relatives, friends, teachers or business associates and at the same time express support for the university.

BSU receives many inquiries regarding memorial gifts. Donations range from single modest contributions to hundreds of gifts for the creation of endowed funds. Endowed funds are popular, in particular, because they provide permanent memorials. A gift of $5,000 or more is invested and the interest gained provides money for scholarships and university projects. Because the original capital is never spent, the fund continues perpetually.

If you would like to know more about memorial gifts to BSU or if you would like to make a memorial gift, contact the BSU Foundation, 1910 University Drive, Boise, ID 83725, or call (208) 385-3276.
BSU's Wild Side

Outdoor research takes flight

Glenn Oakley photo
The Birds of Paradise (Lost?)

By Glenn Oakley

Mayan Temple Four rises 40 feet above the jungle, like the peak of a mountain breaking through dense clouds. At the top of the limestone block pyramid, Chuck Turley perches on a ledge and scans the green treetop horizon with a pair of binoculars. Brilliant red-spotted butterflies alight on his log book, fanning their wings rhythmically.

The screams of howler monkeys break through dense clouds, disturbing the sleep of jaguars. Below the canopy of trees that stretch away from the temple are coatimundis, peccaries, tapirs, deer, ocelots, a fisher-like animal called a lyra, spider monkeys, boas, fer de lances, vipers, countless reptiles, thousands of species of insects and hundreds of bird species. Toucans, parrots and parakeets fly about the trees like brilliant bits of color blowing in the wind.

And soaring just above the treetops an ornate hawk eagle appears, wings outstretched, its feathery crest blown straight back. Turley, a Boise State graduate student in raptor biology, trains his binoculars on the bird and follows its flight.

For wildlife, birds and biologists, these tropical forests are a paradise. But it is a troubled paradise and one that may be lost.

From Central and South America to Africa, the tropical forests are being cut down at an estimated rate of 50 acres per minute. Each year an area roughly the size of Florida is leveled. In some cases the trees are cut by villagers to make room for subsistence farm plots, that, because of the typically thin and poor soils, last but two to three years before wearing out. Then a new patch of forest is cut. In other areas huge swaths of forest are clear-cut for lumber or leveled to make room for cattle ranches and sugar cane plantations.

Only 10 percent of the world's tropical forests remain. In their book, Extinction, Paul and Anne Ehrlich write, "The fate of tropical forests will be the major factor that determines the biological wealth of Earth in the future. Those extraordinarily vulnerable ecosystems are the greatest single reservoir of biotic diversity on the planet."

Yet these remaining forests are vanishing so rapidly that biologists have yet to identify and study many of the native plant and animal species that are becoming extinct.

From his Mayan temple perch, Turley is helping lay the groundwork for The Peregrine Fund's ambitious study of the threatened raptors of Guatemala. But with luck and work, the study, dubbed the Mayan Project, will do more than identify doomed species; it will provide the governments of Guatemala and neighboring countries with the information necessary to ensure the survival of the orange-breasted falcon, the bat falcon, the harpy eagle and the dozens of other raptors in this unique region.

As The Peregrine Fund successfully concludes its original mission of propagating and releasing peregrines into the wilds of the United States, it is meeting an increasing demand and need to apply its skills in the equatorial regions of the world.
The Maya Project is one of three major tropical raptor projects managed by The Peregrine Fund. The Boise-based wildlife organization is conducting a propagation and release program with Mauritius kestrels on the African island of Mauritius and with aplomado falcons in Mexico and the American Southwest. The Peregrine Fund also is involved in several other smaller or developing projects, including a study of the teià falcon along the Zambezi River in Zambia, and establishment of a captive breeding program for the Philippine eagle.

If the tropical raptors can be saved, then the rest of the plants and animals that comprise the tropical forests may also be saved. "If you want to preserve an ecosystem," says Peregrine Fund president Bill Burnham, "focus on the larger predators such as jaguars and harpy eagles. Those raptors requiring a large territory are tools you use to calculate a park size."

Because raptors tend to live few and far between and reproduce relatively slowly, Peter Jenny, the tropical research coordinator for The Peregrine Fund, says, "they can disappear overnight without the ability to repopulate themselves." Jenny says "flagship species" such as the magnificent harpy eagle can also serve as "focal points around which you can excite the general public. What benefits harpy eagles benefits other things as well."

But in the tropics so little research has been conducted, says Burnham, that "we haven't even known how to find the birds of prey. If you don't know where they nest there's no way you can manage them."

Enter Turley. In the spring of 1988 Turley experimented with three different techniques for locating tropical raptors in Tikal National Park: acoustical luring, observation from the ground while walking transects, and observation from emergent trees and Temple Four, a Mayan ruin. Turley, along with three other American biologists and four Guatemalan park rangers, hiked 40 miles of trail in the jungle and climbed 15 emergent trees — trees which rise 10-30 feet above the 70-foot forest canopy. Sixteen study transects were established and the three study techniques were applied on all, from mid-February through mid-June.

The acoustical luring technique involved playing a tape recording of a wood-pecker's distress call and waiting to see what would come flying in for dinner. Sometimes a crested eagle would silently glide through the trees and alight on a limb just above the biologists. On a few occasions the distress call lured in ocelots, which would creep within feet of the tape recorder, oblivious to the researchers sitting next to it.

But far and away the most successful technique was observation from the emergent trees and Mayan Temple Four. The temple lookout was the easiest and most comfortable. To climb the emergent trees, a line would be strung over a limb 80-100 feet above the ground and the researchers would climb straight up the rope on jumars, a rock climbing device. Once at the top the researcher would make himself as comfortable as possible on the narrow limb and scan the treetops for six hours while looking out for poisonous snakes and stinging ants. Occasionally huge bee swarms would cruise by within a few feet of the perch.

In a given day, 6-100 raptors might be sighted from the emergent trees. Some raptors were identified from the treetop perches solely by their calls; they never rose above the forest canopy.

The study team documented for the first time the nests and chicks of the barred forest falcon. Turley says the forest falcon, which had been presumed to be quite rare, may actually be "one or two of the most common raptors down there." Its secretive habits may have contributed to its presumed rarity, he says.

Conversely, the rare harpy eagle remained undetected during the entire study.

Next spring the second phase of the Maya Project will pick up where Turley left off. His observation techniques will be applied to specific raptor species in an effort to discover the basic life histories of the birds — where and when they breed and nest, when their young fledge, where and what they hunt.

Once the natural history of the birds is understood, The Peregrine Fund will suggest areas in northern Guatemala — the Peten region — where parks might be established or expanded to guarantee the survival of the raptors.

Across the world from Guatemala, on the small Indian Ocean island of Mauritius, The Peregrine Fund is embarked on a project to save the rarest falcon in the world, the Mauritius kestrel.
History is not on the side of the falcon or the island it occupies. Uninhabited until the 17th century, the island of Mauritius originally was home to some 22 native birds, including the dodo. Today, says Willard Heck of The Peregrine Fund, "half of them are gone and the other half are in trouble."

Once a tropical wildlife sanctuary, Mauritius is now considered the most densely populated nation in the world, with 1 million people living on an island the size of Ada County. Heck, who directs the tropical raptor breeding program at the World Center for Birds of Prey and on the island of Mauritius, says, "You can see across the entire remaining habitat of the birds."

Boise State graduate student Jody Carter, who will return to Mauritius next winter to continue her studies of the Mauritius kestrel, explains, "They live in the forest and there's very little forest left. And what forest is left is being invaded by exotic plants." Exotic plants are non-native tree species which choke out the native vegetation.

Carter's study, under the auspices of The Peregrine Fund, is to determine where the kestrels, which prey almost exclusively on gecko lizards, are hunting. It is unknown whether the exotic forests support healthy gecko populations, and, if they do, whether the kestrels are able to hunt in the denser foliage of these forests.

Carter has radio-tagged one of the seven nesting Mauritius kestrel pairs remaining in the wild. She plans to tag additional kestrels on her return trip. Carter will be joined by her husband, Michael Jones. A graduate botany student at BSU, Jones will study the invasion of exotic trees on the island.

If history is not on the side of the Mauritius kestrel, ingenuity may be. The Peregrine Fund is not only creating more of the birds through captive propagation, it is attempting to change the very hunting habits of the kestrels.

As it did with peregrines, the organization is breeding the kestrels in captivity and releasing them into the wild. But the released kestrels are being indoctrinated in the hunting of birds instead of geckos.

"What we're trying to do is help the bird adapt to a different environment," says Burnham. "We're experimenting with changing it from a lizard eater to a bird eater."

Captive bred kestrels are being fed birds

Despite the sometimes desperate situation of the tropical forests, biologists remain cautiously optimistic. Barring the sudden development of a cattle ranch in the Peten, for example, Jenny believes the destruction of the northern Guatemalan forests may be slowing. Tourism for wildlife and bird-watching is proving its economic value to many governments of tropical countries.

In the meantime, biologists will be scrambling to collect data and develop techniques necessary to understand the raptors of the tropics.

With tropical raptor biologists combining the most basic exploratory field work in remote jungle locations with some of the most high-tech experiments (such as cryogenics — freezing raptor semen for artificial insemination) Burnham says, "It's an exciting time to be a biologist interested in birds of prey."
There's an interesting dilemma. What if the last wolf on earth were attacking the last whooping crane? Each animal would require the death — and extinction — of the other to ensure its own survival.

The discoveries made by Boise State entomologist Charles Baker on the mountainsides above the Salmon River seemed to present a similar — if smaller scale — conundrum. Fortunately, the two species involved in Baker's study, while still very rare, may be more abundant than scientists originally thought.

The story began in 1936, when river boatman Ed MacFarlane guided two Harvard botanists down Hells Canyon and showed them a flower they never before identified.

The plant went down in the botanical books as *Mirabilis macfarlanei*. *Mirabilis* means wonderful. A member of the four-o'clock family, the plant produces a profusion of brilliant magenta flowers in the spring. Each blossom lasts only one day. The deep-throated flowers open in the early morning or late afternoon, are pollinated during the day, and then close. By the following day they are shriveled remnants of their previous glory, surrounded by a new cluster of flowers. Within one or two weeks, all of the blossoms will have bloomed and withered.

Few people have seen MacFarlane's four-o'clock in bloom, and not only because the flower offers such a short blossoming. *Mirabilis* is Idaho's first and only capital "R" rare plant, as designated under the federal Endangered Species Act.

As a member of the four-o'clock family, *Mirabilis* is far from home. Most four-o'clocks are native to the American Southwest. But in Idaho they have clung to a narrow geographic and climatic zone, occurring in a few clusters from Hells Canyon to the Salmon River north of Riggins. Each population is isolated and distinct.

When the federal environmental agencies started looking at *Mirabilis*, as mandated by the Endangered Species Act, they asked Baker to determine what insects were responsible for pollinating the plant. The concern, notes Baker, was that the pollinating insect might be specific to *Mirabilis* and therefore by definition also endangered.

So in summer 1983 Baker headed north with his insect nets and vials and camped out next to the plants, looking for the pollinators. "That chapter opened and closed within the span of one week," recalls Baker. Plain old ordinary bumblebees handled the pollinating.

But there was more than one chapter to the entomological book for *Mirabilis*. While Baker was finishing up his pollinator studies on *Mirabilis*, someone noticed a tiny, beautifully patterned moth that seemed to linger around the plant, frequently sitting motionless on its leaves for a day at a time.

Baker was intrigued and he started examining this little moth. Could this insect be responsible for the blotched leaves they had noticed? Entomological sleuthing ensued. Baker set out to discover the life cycle of the moth, and sure enough, it was the culprit.

The female moths, he discovered, lay eggs on the underside of *Mirabilis* leaves. When the eggs hatch some 13 days later, the larvae tunnel into the leaves and proceed to chew their way through the succulent greenery, just beneath the surface of the leaf skin. Then the larvae pupate, turning into adult moths, which in turn lay more eggs on the plant. Within one or two weeks, all of the leaves are riddled with damage, the plant is overwintered, and its death is near. In turn, all of the *Mirabilis* plants along this stretch of the Salmon River seemed to go extinct.

This moth was a parasite, harming a rare and beautiful plant, and the entomological community might presume that the automatic reaction was immediate to "control" — which is to say kill — this pest. But that was not the case. This moth feeds solely on *Mirabilis* as rare as the plant. In fact it is probably more endangered than the *Mirabilis*. But in Idaho the populations seem to have moths eating on their behalf.

"As a biologist," says Baker, "I have more confidence in a moth population than in a whooping crane population. It's almost as if the moths are attacking the plant from the bottom up, in a very very far away way they won't drown, but they must cope.

"My hope is we'll find abundant moths throughout the range of the plant, just as the two Harvard botanists did, and that they will be a trying task; they are as small as the grains of sand on the beaches of the Idaho coast. That's the life of a plant in the hands of a predator."

Baker is continuing his study of the moth's life cycle. He has yet to settle on a name. He has already named it *Mirabilis*; now he is searching for something more appropriate.
The second generation of the plant, with huntsman stem.

Endangered plant. One could be to devise a way it there is another con- and hence it is at least rare. While 10 separate ed in Idaho, not all of them. A mixed blessing concern about the moth ed to an island. If they sight starve to death. put enough populations en, in accordance with protected."

cycle, trying to deter- the eggs remain vital, en finding the eggs can "sand that cling to the as others from related ir life mysteries. These moth is indeed a new erer he would have the anists named Mirabilis.

Barely distinguishable, a moth rests on a Mirabilis leaf, top left. Above, Baker inspects a Mirabilis bush on a canyon hillside. A closer view of the flower is at left.
Selling Out the Sawtooths?

Will a national park bring big bucks or big headaches?

By Bob Evancho

Imagine Idaho's Sawtooth National Recreation Area (SNRA) as a national park. The vision conjures up thoughts both exciting and disconcerting. On one hand it would prominently showcase the state's natural beauty. Moreover, it would surely mean an infusion of money with an invasion of tourists. Ah! but therein lies the image that troubles many Idahoans: hordes of intruders with gas-guzzling RVs and ear-shattering ghetto blasters harassing our wildlife and dumping tons of garbage on our beloved mountains.

At opposite ends of these suppositions are state Sen. Laird Noh and Boise State political scientist John Freemuth, both members of an ad hoc advisory board formed by U.S. Rep. Larry Craig to examine the future status of the Sawtooth area.

Noh does not want the Sawtooth area to become a national park. In addition to an incursion of outsiders, he believes a park would create a second undesirable element: insufficient natural resource management. Freemuth thinks the SNRA should become a national park — if it's done correctly and responsibly. In addition to boosting tourism and enhancing the state's image as a scenic location, it would also protect the environment, he says.

Craig believes Idahoans should ponder both viewpoints. That is why Noh and Freemuth are on the 13-member committee, which was organized in late 1987 and will submit its final report, edited by Freemuth, to Craig in late July.

With Stanley in the foreground, the panoramic view shows the unique beauty of the Sawtooth range. Chet Bowers photo
In an interview with FOCUS from his Washington, D.C., office, Craig points out that the advisory board was not charged with determining whether or not a national park should be established, but to make recommendations only. The congressman says he expects partisan views on the subject, however. "If you look at the committee, you will find there are strong supporters of the park idea and there are those very much opposed to it," says Craig. "That didn't happen by accident, that was my intention; that is why we have people like Laird Noh and John Freemuth on the committee."

Noh and Freemuth may represent conflicting views on the Sawtooth issue, but there is one consensus in the debate: With its turquoise lakes, spectacular waterfalls and jagged granite peaks, the SNRA meets the exacting standards required of America's national parks.

It's an elite group indeed. Beginning with Yellowstone in 1872, only 49 sites have been deemed worthy of national park status. "These are our special places," Freemuth says. "The historic reason that many of them were set aside was because of their scenic attractiveness. Lately we've started to talk about the ecology as being important, too, and the uniqueness of some of them as parts of ecosystems."

Given the notion that the Sawtooths are up to snuff as a national park and considering Idaho's political and economic climate, Craig believes it's time to reopen the Sawtooth debate. "I have said that this is worth reviewing. I have never been one who has said a park is the answer," he comments. Nevertheless, Craig points out that because many national parks tend to be "destination targets" for tourists, they generate national attention and help stimulate the economy of the surrounding area. "Most Western states that have experienced good and sound economic growth and development in the tourism and recreation industries have had a major magnet with which to pull people," he says. "Idaho does not have that magnet. We have a lot of little magnets. States like Colorado [with Rocky Mountain National Park] have found that by having a major magnet, all the small magnets benefit... I don't want to see Idaho become another California, but at the same time we need to provide for economic stability and job opportunities for Idahoans."

Stating that minimal growth is anti-

Exhibit: Craters of the Moon has the unique characteristics necessary for national park status.

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Craters of the Moon could be first park
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By Bob Evancho

Don't be surprised if Idaho gets a national park soon. And don't be too surprised if it's not the Sawtooth National Recreation Area (SNRA). There is a movement afoot to expand Craters of the Moon National Monument to include Crystal Ice Caves, the Great Rift National Landmark and Big Southern Butte, all located on the desert of the Snake River Plain, and make it a national park to commemorate Idaho's Centennial in 1990.

There are three primary reasons why Craters of the Moon has a better chance than the SNRA to become Idaho's first national park:

- Qualities. To become a national park, a site must be of national significance, have a diversity of unique resources and receive both congressional and presidential approval. With its unique lava formations, many believe Craters of the Moon is worthy of national park status. The move also has the backing of U.S. Rep. Richard Stallings.

- Management. Craters of the Moon is already under the direction of the National Park Service. Compared to the SNRA, steps to make the area a national park would be relatively easy. Says BSU political scientist and parks expert John Freemuth, "You could enlarge the boundaries... and you could simply change the name through Congress and, bingo, you've got a park."

- Little opposition. State Sen. Laird Noh, an opponent of the Sawtooth proposal, doesn't have any problem with Craters of the Moon becoming a national park. "Craters of the Moon is pretty much a single-use type area," he says. "There is little hunting and little grazing. I just don't sense any opposition to that proposal."

What are the chances of Craters of the Moon becoming a national park in 1990? Jane Leeson, regional associate for the Wilderness Society's Boise office, believes they are "pretty darn good." First of all, she notes the support from Stallings and many of the surrounding communities. "There aren't any real conflicts and there don't seem to be any roadblocks," Leeson says. "It should be full steam ahead."

Nevertheless, neither Craters of the Moon nor the Sawtooths are a shoo-in to become America's next national park. The designation process, Freemuth points out, is very slow. "A good comparison for Idahoans would be the Grand Tetons [National Park]," he says. "It's obviously a marvelously spectacular area, but it took 50 years for it to become a park." Another example is Nevada's Great Basin, which became the nation's 49th national park last August after 63 years after legislation to make it a park was first introduced. Moreover, the first proposal to make the Sawtooths a national park was introduced in 1911. "It's a long process," Freemuth says. "It takes a slow building up of support by various groups."
cipated in Idaho's timber, mining and agriculture industries, Craig believes the state "has a natural leaning toward" the tourism and recreation industries. That is why he says Idaho should consider "using our environment, protecting it and still generating economy from it."

Although he admits a national park would boost Idaho's economy with an influx of tourists, Noh maintains the trade-off is not worth it. "The enjoyment that many Idaho citizens get now in the Sawtooths would be eroded by masses of people. . . . I think without question it would be good for the restaurant, motel and tourist trade in the immediate area around the park. But against that you have to measure the reduction which tends to be more dispersed and less rapidly measured, but certainly significant in the aggregate of the loss of natural resources, the industries that would come from that, and also a certain amount of lost income because Idaho citizens would probably begin to go elsewhere for their recreational experiences."

Freemuth, who has done extensive research and writing, including the dissertation for his Ph.D., on parks and other public land issues, agrees that stimulating the state's tourist trade is not a reason to make the SNRA a national park. But the image of the Sawtooths suddenly swarming with people is a "somewhat groundless fear," he says. Citing a study on Yellowstone done by the University of Idaho, Freemuth says those seeking the isolated backwoods experience can still do so in national parks.

"The report said that about 10 percent of the visitors to Yellowstone use the backcountry," he says. "That means most of the people are concentrated at places like Old Faithful, geysers, Grand Canyon of the Yellowstone and so forth. That indicates that the park is not that crowded in terms of the backcountry. There are other parks, such as [Utah's] Canyonlands, which are managed as semi-wilderness areas.

"I don't think anybody wants an overcrowded park, but in the general sense of promoting tourism in Idaho with an overall promotion plan, a national park would help a lot. Of course it needs to be done in a responsible, intelligent way. You don't just open up the gates without proper planning and talking to all interests involved. If you buy the argument that Idaho's economy is important to all Idahoans and we need to look toward the future, it's probably going to be leaning more toward tourism and less to mineral extraction and timber. Those things will still be important, but they're not going to save the state's economy for the next 100 years . . . . Of course it's a value judgment, but I think the Sawtooth area, including the White Clouds and Boulders, belongs in the park system; it's simply a crown jewel in terms of American scenic natural resources."

With the exception of a sliver of Yellowstone, Idaho is the only Western state without a national park. Again, Noh and Freemuth concur that that is no reason to make the Sawtooths a national park.

But Freemuth believes it does provide food for thought. "We shouldn't look at it like a park is some kind of pork barrel project that belongs in Idaho, and nobody is talking about it that way. Some seem to be saying, however, that Idaho has spectacular scenery as does every state around it, and the Sawtooths are probably the classic area and if people from all over the country realized that that was Idaho, perhaps they would want to visit Idaho more. Not just the Sawtooths, but Boise, the Panhandle and so forth, and most people think that more tourism in Idaho would be a nice way to help the economy that would be relatively clean," he says.

Although there are many who are convinced the Sawtooths should become a national park, it's obvious the state has yet to speak with a united voice on the idea. More than likely, it will be a long, drawn out process. "It's a matter of talking to everyone interested in the idea and promoting it," Freemuth says, "but eventually it will be up to Congress and the citizens." When asked to estimate the chances of seeing the Sawtooths as a national park in our lifetime, Freemuth replies, "Fifty-fifty."

Perhaps Noh best describes the sentiments of those who do not buy the argument that Idaho best describes the sentiments of those who do not buy the argument that Idaho should introduce and show off its scenic beauty and natural

(Continued on Page 53)
The sands of lime are disappearing from the shores of the Snake River below Hells Canyon Dam. And because of the dams upstream, it won't be long, says a Boise State University geologist, before many of the famed river's sandbars are gone completely.

Sandbars, those stretches of sandy beach dispersed along the steep rock walls of the canyon, are most noted as excellent camping sites for whitewater rafters and fishermen. But the sandy sites also serve diverse roles in the ecology and economy of the river.

"Sandbars are very important in the river system," says Monte Wilson, professor of geology and geophysics at Boise State. "They provide a habitat for certain larvae that feed fish and the pea gravel is important for spawning for chinook salmon."

"They're important economically because the river is a world-class recreation area and a wild and scenic river with national recognition. There's nowhere to camp except the sandbars. Brush and rocky areas are predominant and snake infested."

Wilson says the sandbars also provide valuable archeological information as many abound with artifacts from prehistoric campsites.

But the bountiful sandbars along the Snake River are disappearing as regulated water flows from dams upstream steal the fine sands, leaving rock-strewn beaches in their wake.

Inspired by a similar study of the Colorado River in the Grand Canyon, Wilson and graduate student Jeff Allred set out last summer to document the changes in the sandbars since the completion of the Hells Canyon Dam in 1968. According to Roger Fuhrman, resource coordinator for Idaho Power, the dam was built to provide power, flood control and recreation. Wilson and Allred traveled the river surveying and photographing the sandbars and comparing those with past aerial photographic records.

"We found there had been a major decrease in sandbars along the river, both in numbers and size," Wilson says. "Some are totally wiped out."

In order to determine if indeed the damage stemmed from the dam, Wilson and Allred compared flow characteristics of the Salmon River to that of the Snake. The Salmon River is a completely natural river with no dams, and flows into the Snake River west of Grangeville. The two rivers are comparable in size and both are bedrock rivers that flow through rocky canyon terrain.

Hydrological records of water levels on the two rivers were studied to determine fluctuations. Allred and Wilson also permanently marked the sandbars to see how much sediment is deposited and when.

The results were alarming. The unregulated Salmon River not only had more sandbars, but they were stable. Whatever sand that was washed away by high waters was replaced by sediment traveling downstream.

The sandbars on the Snake River, however, were diminishing as sand was washed away and not replaced. All fingers pointed upstream — to the dams.

"Reservoirs are big sediment traps. In a normal situation sandbars are stable, sand is coming and going. Sand is replaced in spring floods," Wilson says. "This won't work on the Snake River because there is not a constant supply of sand mov-
ing down the river.”

Tributaries, which also feed the river sediment, are few and far between on the Snake. The largest tributary on the river is the Salmon and Wilson says more sandbars exist on the Snake downstream from the mouth of the Salmon than do upstream.

A second factor bringing on the demise of the sandbars is the fluctuations of the river level. Wilson says levels in the Salmon River stay relatively low, rise in spring and fall again in July.

The water levels in the Snake, however, are “unnatural.” “There are some very abrupt drops,” Wilson says, pointing to graphs of the river levels. “In a day, the river can go from 50,000 cubic feet per second (cfs) to 15,000. The river level can drop 18-24 inches overnight.”

Wilson explains that loose sand slips off with the water when the level is dropped, so that “each time the water drops, you lose sand.” And, he says, because Idaho Power operates the dam for peaking electricity demands, the water levels rise and fall constantly.

“It’s pretty damaging to the river,” Wilson says. “It’s great for electricity users but pretty dangerous for the sandbars.”

Fuhrman says the river flows can change up to 1 foot an hour, with river flows increasing during the day and decreasing at night. The water flows are regulated to maintain a level of at least 13,000 cfs at Lime Point, which is below where the Salmon River flows into the Snake. Fuhrman says the Federal Power Commission determined that level was needed as a navigation requirement when it was thought that ore would be transported via the river. The ore mining never panned out but the regulation remains.

Physical changes occur at the sandbars as sand is filtered away. “Armoring” results when sand is removed, exposing coarse rocks and debris too heavy to float away. Brush is beginning to encroach upon the beaches where fine sands had before inhibited vegetation.

“After a year my conclusion is there is not enough sand in the system. We originally thought sand was accumulating in the river channels and could be redeposited, but it doesn’t appear to us that there’s enough sand in the system for that,” Wilson says. “They could try getting sand out of the reservoirs but it looks impossible.”

Disappearing sandbars are not keeping their problems to themselves. Upstream, reservoirs are filling with sediment. Downstream, where the Snake dumps into the Port of Lewiston, sand is also accumulating.

“Sand is filling in reservoirs at a significant rate,” Wilson says. “It’s become a problem.”

Wilson says attempts to dredge the sand out have only resulted in the added dilemmas of what to do with the removed sediment. It’s also proven to be an expensive undertaking.

Another possibility is to build a dam upstream from the Port of Lewiston to catch the sediment.

“It sounds patchworky to me,” Wilson says. “The notion is that either way will make a problem.”

Wilson says the purpose of the research originally was to make recommendations on how the sandbars could be regenerated, but now it appears that isn’t possible.

“There are some things that can stop the rate of loss, but Idaho Power has enough people on their case already. The last thing they want is someone hassling them on sandbars,” Wilson says. “There are a lot of operation pressures on them. My notion is without some mega-lawsuit or legislative things, nothing will happen. It’s just a tough situation.”

Fuhrman says so far the only environmental regulations placed on the dams accommodate smolt runs and chinook spawning season. Because an environmental impact statement was not required at the time of the dam’s construction, no study into such effects as the diminishing sandbars was considered.

David Meyers, manager of environmental affairs for Idaho Power, says Wilson is correct in the fact that little can be done to reverse the damage, but says the sandbars could become a primary concern if cultural and archaeological resources known to exist along the river are proven to be endangered.

“Typically it hasn’t been nearly as important as some of the other issues such as wildlife and recreation,” Meyers says, “but it would depend on the specific location and what kind of archaeological resource exists. If there is an effect on cultural and archaeological resources, then it could become an issue.

“It’s just one of a whole list of issues that are important. You have to look at the relative importance of each one and somehow consider them all and make a judgment. What’s good for one is bad for another.”

Wilson says that all sandbars won’t be totally destroyed as some are protected naturally by rock formations and currents, but the widespread reduction and armoring in the past 23 years will certainly repeat itself.

Brush has encroached the sandbars where fine sand had before inhibited vegetation.

Chuck Scheer photo
Studies of Another Nature
From osprey to aquifers, BSU research encompasses everything on, above and below the earth

By Bob Evancho & Glenn Oakley

The capture is commando-like in execution.
A boat cruises offshore, its occupants scanning the trap with binoculars. The victim senses trouble as one foot is ensnared. Struggling, it entangles a second foot in the monofilament nooses.
Nancy Ertter watches intently to make certain the nooses hold and then revs full throttle on the outboard, roaring Iowan\shore.
Just feet away from land the engine is cut and the boat surges ashore, pushed by its own wake. People leap from the boat into the water, and take off running at a full clip. Reaching the nest site, a waiting ladder is hoisted and Ertter charges up the rungs, grabs the talons of the struggling osprey, clips it free from the snares and carries it down. With its head covered, the osprey quiets and undergoes a series of measurements and bandings with little resistance.
Now in her second year of a graduate study, Ertter has captured, measured and banded some 20 osprey at Cascade Reservoir.
Osprey, the fish-eating raptors noted for their spectacular water dives, have dramatically increased in population at the reservoir. Unfortunately, another species has experienced a similar population explosion — algae. Excessive nutrients, such as cow manure and septic tank runoff, have combined with the naturally warm waters of Cascade Reservoir to produce massive algal blooms during the summer months. These blooms may lead to oxygen depletion of the lake — with the result of large scale fish kills. The algal blooms also increase the turbidity, or the murkiness, of the water. Because osprey have a maximum diving depth of one meter, the blooms can effectively hide fish from the birds.
Ertter's study is designed to determine the nesting success of osprey, determine growth rates of osprey nestlings, compare hunting success with nesting success, and evaluate the ospreys' response to algal blooms and fish die-offs.
"We really don't have anything to compare our results to," says Ertter. "So the study creates a baseline. If we start to see a decline in the osprey, then we can come out here and see if it's the change in water quality or whatever."
After the osprey adults and young are banded, weighed and measured, Ertter monitors the hunting osprey. After a bird makes a strike in the water, she motors to the spot and measures the clarity of the water by lowering a metal disc into the lake. The depth at which the red and white disc disappears from view is the measure of turbidity.
Ertter notes that her study is not simply academic. "The turbidity is a problem that people have the power to control," she says.
Ertter's osprey project is one of the first major studies conducted from Boise State's Osprey Point research camp on the west side of Cascade Reservoir.
Crawfish provide food for thought

Bob Ellis and Jim Long like a well-fed crawfish.
For more than five years, Ellis, a BSU chemistry professor, and Long, a zoologist in the biology department, have studied the nutritional requirements of crawfish and shrimp. The researchers use crawfish as laboratory substitutes for the more expensive and temperamental freshwater shrimp.

Their goal is to determine the ideal crustacean diet — one that produces the greatest amount of growth for the least amount of protein. They also are creating a testing procedure that will allow them to predict the results of virtually any commercial crustacean diet that aquaculturists may dream up.

Aquaculturists want a crustacean feed that funnels all of the expensive protein into growth. Basic energy — for swimming, respiration and basic body maintenance — should ideally be provided by the cheaper carbohydrates and fats in the feed.

But how do you know whether a shrimp is using protein or carbohydrates to swim?

Ellis and Long answer this question by injecting radioactive protein into crawfish and then measuring the carbon dioxide they respire. The amount of radioactivity in the respired carbon dioxide is a measure of the protein burned for basic energy. They similarly inject radioactive carbohydrates and fats and measure the respired carbon dioxide.

"An ideal diet," says Ellis, "would minimize the amount of amino acid [protein] burned for energy and maximize the incorporation of amino acid into growth."

The researchers are examining several variables in food use, such as the difference between protein usage in fed versus fasted crawfish. They are also experimenting with alternative forms of protein, such as soybean. The most common aquaculture feeds use fish meal for protein. However, fish meal is becoming increasingly expensive while supplies become increasingly unreliable, says Ellis.

Ellis and Long have been working closely with the Tunison Laboratory in Hagerman, an aquaculture feed site. While the Hagerman Valley remains the single largest producer of commercial trout in the United States, some entrepreneurs are betting that Idaho’s vast geothermal resources can make the state a major producer of tropical shrimp. Regardless of the success of shrimp farming in Idaho, crustacean aquaculture is increasing worldwide, most notably in Third World countries.

Do shrubs help or hurt conifers?

Do nearby shrubs have an effect on conifer seedling establishment in central Idaho? Boise State botanist Dotty Douglas hopes to corroborate one of three answers that have been given to that question.

During this summer and next, Douglas plans to collect data on Douglas-fir in the Boise National Forest to determine whether neighboring vegetation helps, hinders or has no effect on the conifer species’ growth and regeneration.

The interaction between conifer and shrub appears to differ in different locations. In some cases the shrubs seem to aid the seedlings’ growth by slightly reducing soil temperature with their shade. Other studies, however, indicate that insufficient sunlight and chemicals the shrubs produce may be detrimental to seedling growth, while still other research suggests there is no interaction and neighboring shrubs make no difference.

Through funding by the National Forest Service, Douglas will conduct fieldwork to determine the most accurate of the three theories for central Idaho. She and graduate assistant Michael Jones will use two methods.

“First, we’re looking at spatial relations of the seedlings to see if they were helped out by certain shrub species and who tends to be associated with whom,” Douglas explains. “Second, we’re going to look at it from an experimental point of view and plant some conifer seedlings to see how well they grow and how well they do depending on how close they are to which shrubs.”

This summer Douglas will locate study sites. Next summer she will collect the data, which will continue in subsequent years.

Douglas says she’s intrigued by the new research project. “In the literature I’ve read, there is evidence for all three theories, she says. “We just don’t know which will hold true for central Idaho.”
Biology profs dig their work

In the Birds of Prey Natural Area, repeated range fires threaten to destroy the ecology of the desert plateau that feeds the largest concentration of nesting raptors in North America. Returning the area to its former productive condition may hinge on the nutrients and microbes that turn inanimate dirt into living soil.

Two Boise State biology professors are digging into the issue to learn how fire affects the microbes and nutrients of the ground. Marcia Wicklow-Howard is studying vesicular-arbuscular mycorrhizae, a soil-dwelling fungi; Robert Rychert is studying the nutrients and biomass of the soil.

During the last decade, more than half of the sagebrush and winterfat in the natural area along the Snake River has been destroyed by wildfire, according to the Bureau of Land Management's Mike Pellant. Biologists fear the demise of sagebrush could — and perhaps already is — reducing the jackrabbit population, and thus the golden eagle population which preys on the jackrabbits.

The BLM, the federal agency which administers the natural area, has begun reseeding some of the burned areas with grasses, sagebrush and shrubs in an effort to recreate the raptor-rich habitat that has disappeared in plumes of gray smoke.

But simply planting seeds in burned ground may not succeed if such components as mycorrhizae and nutrients such as phosphate, nitrogen and sodium are missing.

Wicklow-Howard's and Rychert's separate but complementary studies seek to determine how fires of varying intensity affect these components.

"No one really knows what happens to these parameters in rangeland fire ecology," says Rychert. By taking sample soil cores from areas which have sustained range fires of varying intensities, Rychert hopes to track the changes that occur in the soil. "It appears that after a burn there are more mineral nutrients available," he says. But he cautions that this is based on a first-year study; conditions could change drastically over a period of a few years.

Rychert will correlate the succession of plants that appear in the burned sites to the changes in the soil chemistry.

Wicklow-Howard's ongoing study at the Birds of Prey Natural Area is tracking the fungi mycorrhizae following range fires. These root-dwelling fungi make critical minerals, notably phosphorous, available to the plants.

Normally, the mycorrhizae and their host plants live together in abundant quantity. But when a fire rages across the desert, the fungi are frequently killed. Her research is aimed at increasing the BLM's success in reseeding burned areas.

"From the standpoint of botany, it's interesting to know about these things," says Wicklow-Howard. From the BLM's standpoint it is critical to know about these things. Says the BLM's Pellant, "A lot of times research is done and you say, 'That's nice, but how do you use it?' Marcia's research has definite applications here."

Earth X-rays: Pelton takes charge

Geology professor Jack Pelton and three graduate students spent last spring exploding underground charges east of Boise to generate what Pelton likens to an X-ray of the Earth's subsurface.

The explosive charges create seismic waves which are plotted with recently acquired state-of-the-art equipment to create a map of the subsurface, down to 2,000 feet.

With a $230,000 grant from the state of Idaho and a $181,442 computer equipment grant from AT&T, the geology and geophysics department is mapping the shallow subsurface of the western Snake River Plain. Graduate students Rob Howarth, Mike Kleinschmidt and Steve Bunch are working with Pelton on the project. The geophysical mapping project will be used to guide land development in Ada County (such as the siting of large structures), and can be used in understanding and managing groundwater, geothermal and mineral resources and hazardous waste disposal.

The equipment and project will also establish BSU as a nationally recognized center for shallow subsurface geophysical mapping, says Pelton. Geophysical mapping is attractive because it minimizes or replaces the need for expensive drilling programs.

This geophysical mapping is expected to be used heavily by geotechnical and environmental consulting firms, construction companies, mining and timber industries, waste disposal companies, planning boards and federal and state agencies.
Watching red-tails like a hawk

By keeping his eye on the birdies — red-tailed hawks, specifically — BSU biologist Richard McCloskey plans to chart the success rate of raptor rehabilitation efforts in southwest Idaho.

"For a number of years injured raptors or young raptors that fell out of their nests have been rehabilitated and released into the wild," McCloskey says. "But no one has really followed up on those birds once they were released to see if they survived. Our feeling was that we were spending a lot of time and money to rehabilitate those birds, but we didn't know if there was any reproductive success once they were released."

Tiny transmitters attached to the released hawks are the primary tools in McCloskey's work. By electronically tracking the birds, he not only can determine their whereabouts, but their mortality rate as well. The transmitters have mortality monitors so if a bird dies, the carcass can still be located.

"Another aspect of the project that no one has looked at is whether the birds that were injured incurred those injuries because of genetic problems," McCloskey says. "Our concern was that we might be releasing genetically inferior birds into the wild population. By doing that, some raptor ecologists say we may be doing damage to the wild population. What we can do now is determine a couple of things: Once the birds are released, are they being assimilated into the wild population? And if they are assimilated, are they reproducing?"

In cooperation with the Bureau of Land Management and the Idaho Fish & Game Department and funded by faculty research grants, McCloskey's project began in June with the release of the birds. Red-tailed hawks are being used, he explains, because 40 to 50 of that species are rehabilitated in Idaho per year.

McCloskey and graduate assistant Alison Beck will monitor the birds in the 10-county area from the ground during field trips. "We're trying to arrange time with reconnaissance flights once or twice a week," he adds. "We might be able to arrange something with the Bureau of Land Management or other agencies that have regular flights over the area."

Boring work excites Wood

As the southeast section of Boise grows, so does the demand for water. Unfortunately for Boise Water Corp., the groundwater supply in that part of town is anything but plentiful. That's where BSU geologist Spencer Wood's borehole geophysics research comes in.

"There has always been difficulty finding inexpensive, long-lasting water supplies out there," says Wood. "So Boise Water Corp. asked us to put together a picture of the geological framework of southeast Boise to give them a better understanding of what aquifers they could drill for to use as good, high-production wells for the expansion of the city."

Wood and assistant Ed Squires have presented that picture with borehole geophysics research. "When a well is drilled, we take electronic measurements of it," he explains, "and that allows Boise Water Corp. to understand what's in the well and how to construct it as a water production outlet. There are quite a few things that need to be determined. For example, where are the layers from which plentiful water will flow? When a well is drilled, it's not entirely clear what was encountered during the drilling and what the well might contain. With borehole geophysics, we can give Boise Water Corp. and the well driller better information for the final construction phases of the well."

According to Wood, the borehole geophysics research will accumulate a vast amount of geological data about the Earth's shallow subsurface (down to 2,000 feet) in the Boise area. "Much of it is information that's never been known before," he adds.

Wood's research efforts will be enhanced by a highly sophisticated digital borehole geophysics system that the university acquired in June. The system has a field computer that will interface with a master computer on the BSU campus.

"The whole system will allow people to get very precise information on the upper half mile of the Earth's crust," Wood comments. "The instrumentation means we will be able to do more and do it more efficiently."
Back to the basics of basins

Fieldwork by two BSU geology professors and six students in the mountains of eastern Nevada is producing a "new chapter in the book of Western geology," and may lead to oil and gas exploration in Nevada and southeastern Idaho.

Professors Walter Snyder and Claude Spinosa are unraveling the forces and events which created huge basins and then rapidly filled them with sediment 283 million years ago. In the last 200 million years these basins have been lifted and eroded to form mountains, scattering the clues to the geological puzzle across miles of rugged terrain.

While most of the sedimentary rock from the basins is limestone, Snyder says there is clay-rich rock interspersed, and this may prove to be source rock for oil. The geologists say resource exploration companies are interested in the region, but a lack of adequate geologic data hampers the companies' progress.

"The things we do are precisely what the oil companies need...they need to know the geologic history," Snyder says. The geologists hope to work north from Nevada, expanding their project into southeastern Idaho, which has similar geologic basin structures and oil potential.

The current study, funded by a major grant from the National Science Foundation, focuses on the Dry Mountain Trough of eastern Nevada. Working out of remote mountain camps, the geologists are measuring, sampling, describing and mapping the layers of exposed rock from the basin. Eventually, the work will lead to a computer-simulated reconstruction of the creation, filling and lifting of the basin, according to Snyder.

Also working on the project are graduate students Dora Gallegos, Steve Dobbs, Wang Dechin and Eric Henderson, and undergraduate students Sonja Anne Ward and Cliff Baines.

Hot water put on back burner

Charles Waag's interest in one of Boise's most unique natural resources has the BSU geologist in hot water — so to speak.

Since 1984, Waag and fellow geology professor Spencer Wood have monitored the geothermal system that heats most of the homes along Warm Springs Avenue and several public and commercial buildings, including Boise High School and the Veterans Administration and Capitol Mall complexes, in the downtown area.

Currently, the underground system is tapped by the Boise Warm Springs Water District, the city's Department of Public Works, the state's Department of Water Resources, the VA hospital and several other smaller users. After formal plans to expand the system, which until recently included bringing Boise State on line, were considered a few years ago, Waag says he and Wood decided it was important to determine whether the underground hot water was an inexhaustible energy supply or a limited resource that could run out, or at least run low.

"There were more and more people taking water out of the aquifer, but we really didn't have a good estimate of the extent of the resource and the system's viability," Waag says.

Since 1984, Waag and Wood have received funding from the Idaho Water Resources Research Institute, the Idaho Department of Water Resources and Boise State's Research Center to gauge the water level in certain wells in an effort to determine the system's vitality and regeneration power.

Their findings? "Move cautiously," Waag advised BSU and other potential geothermal customers.

"You can look at it like this: The system may be able to supply the water, but we will have to accept levels of drawdown that are quite large," he says.

The drawdown (a lowering of the water level) in the system's aquifer is largely the result of withdrawals by users of the system.

The result? The research conducted by Waag and Wood was a factor in the state's decision to declare the aquifer a groundwater management area, and in Boise State's decision to postpone plans to tap the geothermal system.

The two geologists' work is not complete, however. From now until May 1989, they plan to monitor the system.

In the interim, they are encouraging expanded studies of the system, especially those that emphasize reinjection of the partially spent geothermal waters.
Terry Gross hosts FRESH AIR, a national radio magazine featuring a lively look at the arts and contemporary culture.

Catch a breath of FRESH AIR, weekdays at 2 p.m. on KBSU.
National Public Radio in Vietnam
by Alex Chadwick

Of the three of us from National Public Radio, only I had served in Vietnam as an American soldier. But certainly the war had played a big part in the earlier lives of my colleagues, producer Art Silverman and recording engineer Flawn Williams. Like most Americans, they'd suffered their share of anguish about the war; we were all eager to see what had become of our former "enemy."

Although unfamiliar with Vietnam, Art and Flawn had both traveled in Asia and were prepared for a demanding journey. We knew Vietnam suffered real poverty. We carried with us batteries, tape, wires, and other supplies. The stuff that was available in Vietnam would probably be too unreliable for Flawn to use. We didn't expect to be able to reach NPR by phone, though in fact this proved relatively easy the one time we wanted to file a story. But generally speaking, our expectations of discovering a country struggling to survive were fulfilled.

There were many instances of our asking for simple items carried on the brief menu at our hotel in Hanoi, only to be told the kitchen had run out of what we wanted. Eggs and papaya were always plentiful, but other fresh fruit and vegetables were not. Nonetheless, we realized very well that if we couldn't get a varied diet, with a comparative fortune in American dollars to spend, the ordinary Vietnamese certainly faced real hardships. This was the cold and rainy season in the northern part of Vietnam. It's not harsh for anyone used to winter in our country; still, there is a chilly, penetrating drizzle a lot of the time. But, although people everywhere were bundled against the cold, we never stayed in a heated building or even visited one.

Traveling anywhere was difficult. The roads are very bad in Vietnam, the railroads are even worse, and most horrifying of all are the airplanes. They are old—very old—Soviet-built passenger jets. An international aid worker advised us to fly Air Vietnam only from airports in other countries, where it was possible for the plane's crew to get maintenance parts, or new tires if they were needed. But the realization occurred that should flying from point A to point B actually be successfully achieved, a return flight would then become necessary.

On one occasion, our driver nearly ran down a man on a crowded street in Hanoi. The victim was in his mid-40s; he wore a tunic, and there was a ribbon stuck over the left breast pocket, where a military man might pin a medal. When he saw the driver's passengers were Westerners, his face twisted in anger, and he shouted threats and curses. Except for this incident, we found the Vietnamese almost universally eager to receive us. There simply was no widespread, lingering ill-feeling toward Americans.

Everywhere, people asked if this was our first visit to their country, a question I came to think of as a polite way of asking if any of us had participated in the war. We answered honestly each time the question came, and—although I was at first uneasy that my own history of involvement might stir resentment—if anything, our questioners seemed to show me greater kindness.

There remains tremendous interest in the United States. Radios and tape decks
carried on the street blast out songs by American pop groups. Blue jeans and T-shirts carry messages from U.S. colleges, or for soft drinks or beer, or some fad popular in the U.S.

We did encounter Vietnamese who were quite unhappy with their lives. Many of them had had some connection to the United States during the war, and they said the present government holds their past against them. We were told by several long-time observers that there are tens of thousands of Vietnamese still trying to flee the country, unwilling to wait out the clogged process of getting accepted for legal emigrant status. These would-be refugees are attempting to get out even as former refugees, most now American citizens, are beginning to go back to their birthland as tourists.

The political leadership in Vietnam today says it is undertaking reforms, and that it is once again very interested in getting reacquainted with the West. But most experts think that Vietnam is realistically years, and more probably decades, away from any kind of prosperity. Life in the country is not easy, and that's not about to change.

Still, a visitor passing through the region can see that Bangkok, Thailand, for instance, now looks pretty much like any modern, developed commercial center. It's full of tall, new glass buildings, and neon lights. There are screaming billboards and streets insanely overrun with cars. You can probably buy anything you want on very short notice; certainly there are plenty of hustlers on every corner offering to tempt the flesh.

But Vietnam, for all its ills, still looks like Vietnam. It retains its own pacing and very considerable charm. Even as it turns outward now and beckons to the world, its tough and determined people will no doubt cling to that which they value most: their national character, their sense of themselves as Vietnamese—and thus independent and different from everyone else. 

In the crowded field of talk radio, where topics tend toward the trendy and superficiality often substitutes for skilled interviews, Fresh Air with Terry Gross is rapidly carving out a reputation for substance, originality, and wit.

Fresh Air, public radio's highly praised weekday magazine of contemporary culture, is now entering its second year of distribution by NPR. Its lively interviews, reviews, and commentaries are heard weekdays at 2 p.m. on KBSU. With its provocative coverage of popular culture as well as fine arts, Fresh Air is challenging the mistaken image of public radio as highbrow.

In the past year, Gross has encountered a parade of provocative guests from the worlds of music, art, literature, theater, film, journalism, and politics—facing writer John Updike and comic Emo Philips with equal ease. Unlike the quick, glib plugfests that characterize most "celebrity interviews," Gross's probing exchanges paint revealing portraits that entertain as well as inform. Writers like Tom Wolfe and Toni Morrison are favored guests, as are film directors like Louis Malle and John Waters.

Newcomers also have a place on Fresh Air. Says Terry Gross, "We see ourselves as scouts, tracking the really interesting people who haven't yet made names for themselves." That means that along with the Shirley MacLaines and Sam Donaldsons, Fresh Air will frequently feature emerging comics, musicians, and novelists.

"I'm doing what I've been doing my whole adult life," says Gross, who serves as executive producer for the program. "My goal is to help that person tell his or her story, and to learn something about them I didn't know before."
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Used Cars:

Tom and Ray Magliozzi drive hard bargains on “Car Talk”

How do you find a good used car? “Simple,” says Ray Magliozzi. “Wait until it’s dark, go to a good neighborhood, find a car you like, switch plates, and drive away!”

Ray cracks up. He and his brother Tom, co-host the popular weekly NPR program Car Talk, which airs Sunday evenings at 7 on KBSU. They are attempting to answer a fundamental question posed by Car Talk Assistant Producer Doug Mayer, following the weekly taping of the show at WBUR-FM in Boston.

It’s been a good show, and now both men are turning their attention to a question from one of the troops:

Whither used cars?

“I’d look in the Sunday paper,” says Tom. “I’d look in the paper for a car sold not by a dealer, but by individuals.”

“But you’ve got to be prepared to spend a lot of time researching it,” says Ray. “You can’t buy a car in a weekend.”

Tom seems incredulous at Ray’s suggestion, and brother Ray concedes that the transaction can indeed be completed in a weekend, but that it’s highly unlikely that one will find the ideal car in the first shot.

How much money should you pay? “Well, what’s a new car cost?” asks Tom. “Twelve, thirteen grand? You want to spend less than that.”

“If you’re like my brother, you want to spend twelve, thirteen hundred,” laughs Ray. More guffaws.

“Used cars cost $7,500!” “Naw! You’re crazy,” declares Tom. “Used cars cost $4,000.”

“Yeah. And another $1,500 to fix them up,” says Ray, only slightly sarcastically.

Tom suggests $2,500 to buy the car, and $1,500 to fix it. “If you’re really cheap, you can get a driveable and safe used car for 4,000 bucks, but probably not less.”

And never believe used car salesmen, adds Ray. “They lie to you!”

“When you buy from an individual, you can tell if someone’s been a car abuser. I mean, would you want to buy a used sports car from some kid who’s 23 years old and probably beat it into the ground?”

But doesn’t a dealer give you a warranty or a guarantee?

“Not always,” says Ray. “In some states there’s a law which allows dealers to sell cars in ‘as is’ condition, which means caveat emptor. So have it checked out before you buy it. In fact, have your mechanic suggest a car to you, something that he likes to work on and is familiar with. If you’ve been going to the same guy for 15 years to service your Oldsmobile, and you’re going to buy a Subaru now, and he doesn’t work on Subarus, then you shouldn’t buy a Subaru!”

Tom suggests, thoughtfully, that maybe one should find a new mechanic.

So is buying a used car still a good idea? “Yes,” says Tom firmly. “Unless you’ve really got money. But if you’re trying to save money, you should always buy a used car. It can never cost you less to buy a new car.”

“But,” says Ray, “then you’ll never know the excitement of smelling the new car smell, of making those payments to the bank every month, or of fighting with the service manager over something you think needs fixing for nothing! And besides, if there aren’t more people out there buying new cars, where do all those used cars come from that we’re suggesting people buy?”

“Gee,” replies, Tom. “I never thought of that.”

“So buy new! Go for it!” says Ray. “So is that it? Can we go home now?”

Certainly. And, one would hope, in a good used car. From a good neighborhood.
Morning Edition: News you can use, featuring local, national, and international news and information. Produced in cooperation with National Public Radio, KBSU's Morning Edition features local and regional news, broadcast live from KBSU's studios. (6-9 a.m., Mon.-Fri.)

Morning Passages: Classical music for the weekday lifestyle. Listen at home, in the office or on the road. Karl Haas begins with his "Adventures in Good Music" at 9 a.m. Bob Eddi continues with the Treasure Valley's only morning classical program. (9 a.m.-noon, Mon.-Fri.)

Classics with Kate Remington: Each weekday, Kate brings you music that is sure to provide a pleasant accompaniment to your afternoon activities. Write her with your classical music requests. (noon-2 p.m., Mon.-Fri.)

Fresh Air: Host Terry Gross interviews the most interesting people in the world of arts and entertainment every weekday. Tune in for the latest book and music reviews, combined with a first look at the afternoon's news. It's breathtaking! (2-3 p.m., Mon.-Fri.)

Radio Reader: At long last (and by popular demand), Dick Estill reads newly published books covering the gamut from novels, history, humor, science fiction, and autobiographies. (3-3:30 p.m., Mon.-Fri.)

Morning Radio: National and international news from the staff of the Christian Science Monitor newspaper. Catch both the daily and weekend editions. (3:30-4 p.m., Mon.-Fri; 6-7 a.m., Sun.)

All Things Considered: Award-winning program of news, interviews, and special features gives you a head start on the evening news. Now with regional news updates! 4-5:30 p.m., Mon.-Fri; 6-7 p.m., Sat. & Sun.)

Mystery


Tune your favorite writers meet a radio mystery. A new chapter, a new author each week.

Gregory McDonald
Donald E. Westlake
Tony Hillerman

Weekend Edition
with Susan Stamberg
Sundays 7-9 a.m.

Business Update: Business news for everyone. If you invest your money in the stock market, or spend it in the supermarket, tune in for the latest news about business and consumer issues. Listen each afternoon for closing quotes on stocks of regional interest. (5:50-6 a.m., 5:30-6 p.m., Mon.-Fri.)

Cameo Concert: Dimertime classics hosted by Rich Kleinfelt. Every day, a different artist or ensemble is featured in a cameo performance. (6-7 p.m., Mon.-Fri.)

BBC Radio Newsread: The most respected news gathering organization in the world brings you a quarter hour of international reports from its own correspondents. (7-7:15 p.m., Mon.-Fri.)

Blue Monday: Blues you can use as you finish off that first day of the workweek. (10 p.m.-2 a.m., Mon.)

Edges: The outer realm of music, and then a little further. A KBSU tradition continues to be a Treasure Valley favorite. (10 p.m.-2 a.m., Tues.)

Mutant Pop: The most alternative music in Boise. Join Mark Hanford and Tim Tate for the best in independent and experimental music on the cutting edge of rock. (10 p.m.-2 a.m., Wed.)

Fluid Drive: With Arthur Ballinger. An energized musical offering featuring a varied spectrum of jazz, blues, and fusion. (10 p.m.-2 a.m., Thurs.)

Rockology: A historical look back at rock and roll. You'll hear all the greatest music from the late '60s to the early '80s (10 p.m.-2 a.m., Fri.)

Dawn Flight: Also with Arthur Ballinger. Always an uplifting mix of rock, jazz, and blues, with a smooth landing planned on the itinerary. (2-6 a.m., Sat.)

Jazz with Latz: Jazz plus a subtle blend of blues and soft rock. A great way to start your weekend. (6-10 a.m., Sat.)
Private Idaho: If variety is the spice of life, then this is one spicy meatball! Join Victor Pacania for a spontaneous blend of musical styles, from folk to fusion, rock to reggae, new age to new wave. It's music you want to hear, now in its tenth year. (10 a.m.-2 p.m., Sat.)

Mountain Stage: Live performances of folk, bluegrass, jazz, and blues mixed with storytelling, poetry, and a bit of creative lightning. (2-4 p.m., Sat.)

Good Evening: Noah Adams and guests perform live from the World Theatre in downtown St. Paul. The beginnings of a new tradition in family entertainment. (4-5:30 p.m., Sat.)

Evening Passages: Our program features both progressive and traditional jazz. What's more, it's live! (7:15-10 p.m., Mon-Fri.)

Sound Print: Highly produced documentaries from the American Public Radio Network. (5:30-6 p.m., Sat.)

A Prairie Home Companion: Family radio at its best. Join Garrison Keillor for music and "the news from Lake Wobegon, Minn." (7-9 p.m., Sat.)

Fossil Flashbacks: The rock and roll of the '50s and the '60s (9-10 p.m., Sat.)

Saturday Night Blues: Four hours of the finest in blues, from Son House to Johnny Winter. (10 p.m.-2 a.m., Sat.)

The Left Hand of Dawn: Whether you're a Sunday morning early bird, or a Saturday night owl, David McElwain brings you his music to accompany your dawning thoughts. (2-6 a.m., Sun.)

Weekend Edition: News, interviews, and features hosted by Susan Stamburg. Listen while you're making breakfast or reading the paper. (7-9 a.m., Sun.)

The New York Philharmonic Orchestra: Just the right prelude to KBSU's Sunday Concert Hall. Great performances by a great orchestra. (9-11 a.m., Sun.)

The KBSU Sunday Concert Hall: Seven hours of your favorite classical music. Another Treasure Valley tradition on KBSU. (11 a.m.-6 p.m., Sun.)

Car Talk: The wackiest, most informative call-in show for car repair in the country! Hosted by Tom and Ray Magliozzi, otherwise known as "Click" and "Clack." (7-8 p.m., Sun.)

Quirks and Quarks: From black holes to acid rain, from the physics of hair spray to a new laser for birthmark removal, from cancer to AIDS, host Jay Ingram goes to great lengths to make technical topics fun to listen to. And, yes folks, Jay has a master's degree . . . in microbiology; Dr. Science, eat your heart out! (8-9 p.m., Sun.)

New Dimensions: Intriguing interviews with a focus on self-actualization. (9-10 p.m., Sun.)

Blues Deluxe: A closer look at the best in traditional and contemporary blues, including an entire album each week. (10 p.m.-2 a.m., Sun.)

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people, National Public Radio means
more than the news, it means the world.

NATIONAL PUBLIC RADIO NEWS
Beaver leads alumni

Bob Beaver, principal at Campus Elementary School in Boise, was selected this spring as president of the BSU Alumni Association for the 1988-89 academic year.

The association includes more than 35,000 alumni and provides a variety of social, academic, political and fund-raising support services to the university.

Beaver, who received a bachelor's degree in education from BSC in 1969 and a master's in 1971, has served on the alumni board of directors for seven years. He has been with the Boise school system since 1969.

The new president says this will be a year when the Alumni Association improves many of its existing programs and takes an active role in fostering growth at BSU.

"We plan to improve our affinity card program, increase membership, support the university's plan for building growth and increase support of the Blue Thunder Marching Band," he says.

Beaver says the association must become more involved in political issues, especially those that relate to funding of higher education. Unity among all Idaho alumni associations will be especially important this year, he explains.

"I think the alumni associations are working very closely together . . . we have common goals as far as the university system is concerned. If we start fighting among each other we're defeating our purpose. Once you start polarizing universities or different parts of the state, no one is going to work very closely to help us out."

Beaver will be one of the alumni and university presidents traveling the state in late October to conduct a series of town meetings about higher education and its needs.

"The Alumni Association has to become a force that increases awareness of what is happening at the university, and that helps the general public get behind the university," he says.

Other officers elected to the BSU Alumni Association include: Carol Hoidal, consultant, first vice president; Mark Litteras, First Security Bank, second vice president; June Pugrud, Washington Federal Savings, secretary; Booker Brown, Morrison-Knudsen, treasurer; and Conni Bunch, educator, ex-officio director.

Those on the Board of Directors include:

- Mike Bessent and Tom Blaine, Albertson's;
- Paula Forney, Events Unlimited; Jeanne Lundell, Lady Green Thumb; Mike Miller, First Security Bank; Wayne Mittleider, Idaho Housing Agency; Jolene Ogden, Boise Podiatry Clinic; Ray Oldham, First Interstate Bank; Galen Schuler, Idaho Department of Commerce; Patrick Sullivan, office of Sen. James McClure; and Odette Sutton, First Interstate Bank.

Reception opens season

The annual pre-game (BSU vs. Sam Houston State) champagne reception is scheduled for Saturday, Sept. 10, at 5 p.m. prior to the Sam Houston State-BSU game on the terrace of the United First Financial Center, located on Broadway Avenue across from Bronco Stadium.

The annual event, which kicks off the first home football game, is sponsored by the BSU Alumni Association. Alumni, students, boosters and friends of BSU are welcome.

1950s

- Donald Maypole (AA, '54) received a federal Fulbright award to serve as a drug abuse prevention consultant to the Ministry of Health in Qatar, Eastern Arabia.

1970s

- Jean M. Kateley (MA, '72) accepted a position as assistant professor, school of education, department of special education at Western Illinois University in Macomb, Ill.
- Robyn Metz Riggers (BM, '76) is teaching piano and keyboard harmony at Treasure Valley Community College.
- Frank Irton (MA, earth science, '77) was Idaho's recipient of the 1987 Presidential Award for Excellence in Science and Mathematics Teaching. He regularly teaches at Mountain Home AFB Junior High School but currently has an American Geological Institute Fellowship in Washington, D.C.
- Michael Klappenbach (BBA, finance, '78) has opened a new business in Boise called Factfinders, which offers clients factual library research on any topic.
- Richard A. Young (MA, education, '78) is employed with the Boise Art Museum as curator of education. His duties include development for visual arts educational programs including classes, workshops, lecture series and seminars at the museum.
- Joni Fleenor (business/real estate, '79) joined the Idaho Falls office of Intermountain Mortgage as assistant vice president and branch manager.

1980s

- Darrell R. Gustavson (BA, economics, '80) was promoted to assistant manager of the Ontario, Ore., branch of U.S. Bank.

Ann F. Harringan ('80) was selected as Idaho's nominee for the Christa McAuliffe Fellowship. Harringan is a biology teacher at North Junior High School in Boise. Karen E. Meyers Johnson (AS, nursing, '82) received a master of public health degree in community health from the University of Texas Health Science Center at Houston.

Stuart N. Summers (BBA, management, '83) was promoted to regional marketing manager for Johnson & Sons in California.

Marc Schaffner (BBA, management, '84) was named an account executive in the retail advertising department of the Coeur d'Alene Press in Coeur d'Alene.

Tracie M. Summer (BBA, finance, '84) is employed as a medical sales representative for Abbott Labs, a pharmaceutical company in Laguna Niguel, Calif.

Joel Boaz (BS, anthropology, '84) received a Fulbright award to work at a museum in Norway. Boaz is also a Ph.D. candidate at the University of Wisconsin-Madison.

Jane S. Wassmuth (BS, '84) was selected as a delegate for the first United States People to People Fitness, Delegation to the Peoples Republic of China. She is currently the physical fitness coordinator for Wackenhut Services, Inc. for the Department of Energy, Strategic Petroleum Reserve Project in New Orleans.

Russell Beams (BBA, finance, '85) is an insurance adjuster with GAB Business Services, Inc. in Twin Falls.

Jay Pickett (theatre arts, '85) recently guest-starred in ABC's Vietnam-based series China Beach.

Dale Hasenoehrl (BA, social work, '86) was named the Region II Rehabilitation-of-the-Year by the Idaho Division
Sixties
grads gather

The '60s. Who can forget that watershed decade that brought us Vietnam, the Beatles and Richard Nixon? Even Boise State didn’t escape the tumult; the school went through rapid growth that was reflected in two name changes. Now the classes of the '60s can get together and reminisce during a reunion scheduled for Homecoming week, Friday and Saturday, Oct. 28 and 29 at BSU.

The reunion festivities will begin with a dinner and dance, featuring the Mystics, at the Red Lion Riverside on Friday. Saturday’s schedule includes a campus tour, parade, the “World’s Largest Tailgate Party,” and the Nevada-Reno vs. Boise State football game.

Registration for the reunion events is $20 per person and football tickets are $11 each. For more information and to make reservations, contact Karin Woodworth of the BSU Alumni Association at 385-1959.

Alumni who know of fellow alumni not on the association’s mailing list are also asked to contact Woodworth.

Registration form
BJC/BSC 1960-69 class reunion

Name ___________________________ Class year ________

Maiden Name ___________________________ 

Spouse’s name (if alum) ___________________________ Spouse’s class year ________

Address ___________________________

City ___________________________ State __________ ZIP ________

Yea, I will attend. Enclosed is a check for the following events:

Dinner and dance @ $20 per person ________

Football tickets @ $11 per ticket ________

Total amount enclosed ________

Mail check and registration form to:
BSU Alumni Office, 1910 University Drive, Boise, ID 83725.

of Vocational Rehabilitation, Haaseohr is a vocational rehabilitation counselor in Orofino.

Nancy M. Paine (BBA, marketing, '86) is teaching marketing and advertising at the College of Southern Idaho in Twin Falls.

Kathy S. Freeman (BA, theatre arts, '86) has been named director of the Salmon River Playhouse in Salmon.

Greg Gustafson (BA, communication, '86) is a sports writer for the Cœur d’Alène Press in Cœur d’Alene.

Doreen J. Turski (BA, social work, '86) received a master of social work degree from the University of Denver. She is a clinical social worker in the Dialysis Center at AMI Presbyterian Denver Hospital.

Charlie Potts (BBA, business, '86) is a property claims adjuster for Beacon Insurance Company in Middletown Heights, Ohio.

Jay Carstens (BBA, quantitative management, '86) is attending law school in Concord, N.H.

Gay L. Iseri (BBA, information science, '87) is working for the credit department of Bankcard Services at Moore Financial in Ontario, Ore.

Elaine E. Hellwig (history, '87) was chosen as one of eight guardsmen from throughout the United States as 1987 Outstanding Guardsmen of the Year. Hellwig teaches history, global affairs and western civilization at Nampa High School.

Robin Dake (BA, communication/English, '87) has been accepted to the University of Colorado at Boulder’s graduate program in social conflict. She was also awarded a teaching assistantship for one year in the university’s sociology department.

Alan D. Beckett (AAS, food service, '87) completed Army basic training at Fort Dix, N.J. Becky Rodabaugh (BBA, accounting, '87) is employed as a staff auditor with Arthur Andersen & Co. in California.

Karen Connolly (BBA, accounting, '87) is employed with Coopers & Lybrand, an accounting firm in Boise.

Pat Charlton (MPA, public administration, '87) has been hired as the principal of American Falls High School.

Kim McCleary (BS, information science, '87) is working as a programmer for Hewlett-Packard in Oregon.

Kenneth Moreno (CC, industrial mechanics, '87) is employed by the Pillsbury/ Green Giant Co. in Buhl as a mechanic and supervisor.

Timothy Showers (BA, art, '87) completed an armor officer basic course at the U.S. Army Armor School in Fort Knox, Ky.

James L. Martin (BS, criminal justice, '87) is attending the University of Idaho law school.

Rose Mari Totorica (BBA, information science, '87) is employed with U.S. West Communications in Denver in its radio engineering center.

Susan E. Peizak (BFA, fine arts, '87) is a sculptor at

Bernard Yurke and Richard Slusher figured out a way to squeeze the noise out of light.

As Yurke, a former Boise State student, and Slusher explained in the May 1988 cover story of Scientific American, it’s done with mirrors. And laser beams, sodium chambers and incredibly precise equipment.

But wait. What is this about squeezing light? As the authors, both researchers at Bell Laboratories in New Jersey, explain in their article, “the quantum theory states that any light must be accompanied by a certain minimum amount of fluctuation, which limits the fundamental precision of observations carried out with light beams... A beam of light consists of an oscillating electromagnetic field. In the world view of classical physics, the oscillations of the field can be pictured as a smooth wave, whose shape can be described with absolute certainty. According to the quantum-mechanical uncertainty principle, however, such certainty is unattainable; the best one can say is that the wave’s shape fits within a particular ‘envelope’ of uncertainty. That uncertainty is manifested as noise: small random fluctuations in the electromagnetic field.”

Quantum mechanics quickly begins to sound like Zen Buddhism, but it is very real and very applicable to
modern technology. Yurke, a Boise native who spent two years at Boise State College in the early 1970s, says squeezed light has potential applications in increasing the precision and efficiency of short-distance telecommunications, optical computing, and even digital compact disc players. Basic research will also benefit.

As the authors note in their article, “Noise also limits the precision of spectroscopy, in which the frequency and intensity of the radiation emitted by atoms or molecules yield information about their properties. Squeezed light provides a way around some of these limits.”

Yurke, who earned his Ph.D. from Cornell, says he began experiments with squeezing microwave frequencies in December 1982 when he joined Bell Labs. In 1983 he says he “struck up a collaboration” with Slusher, who was already working on squeezing light. “In 1985 we reported our success,” he says, adding that they have spent the last few years “working out the bugs in the process.”

The apparatus for squeezing light involves a cavity with mirrors on both ends. A laser beam is directed through a chamber of sodium gas which has been placed in the center of the cavity. The laser beam is reflected back on itself by a mirror to form a second standing wave.

This wave causes rapid variations in the optical properties of the sodium which in turn alters the original standing wave from the laser beam. The result is some of the waves resonating in the cavity are amplified and others are reduced. The effect is to squeeze the light — increasing the noise in some parts of the light, but decreasing the noise in other parts.

Yurke says he is now working on squeezing the thermal noise out of microwaves, the project he started before joining Slusher on light squeezing.

Yurke, above, co-authored a squeezed light article that appeared in Scientific American and received attention in AT&T’s PROTO magazine.

Bell Laboratories photo and graphic
BSU athletes set their sights on Seoul

The Olympics. That's the dream of most amateur athletes around the world. And at least two Boise State track standouts will realize that dream this September at the 1988 Summer Games in Seoul, South Korea.

Four other track athletes from BSU could qualify for the Summer Games; unfortunately all four are long shots — two because of injuries and the other two because of stiff competition in their events.

As of press time, high jumper Troy Kemp and sprinter Itai Illouz, both members of the 1988 Bronco men's track team, made the Olympic squads of their native countries.

Kemp, a four-time All-American at BSU, will compete for the Bahamas. Kemp captured the Big Sky high jump championship in 1987 and 1988 and was a top-three finisher in the NCAA meet the last two years. His personal best is 7-6 1/2. Kemp, who concluded his senior season this past spring, jumped 7-5 to qualify for the Bahamian national team. He also took second in the 1987 Pan American Games and 12th place in the world championships last summer in Rome.

Illouz, a sophomore, will compete for his native Israel in the 100-meter dash. Illouz holds the Israeli national mark in the event with a time of 10.52, which he set at the Bob Gibb Meet in Boise earlier this year.

Other BSU athletes with chances to make the trip to Seoul are triple jumper Wendell Lawrence, discus thrower Steve Muse, heptathlete Crystal Young, and former Bronco high jumper Jake Jacoby.

Lawrence, a three-time All-American and the 1988 Big Sky champion in the triple jump, failed to make the Bahamian team, but was named an alternate. If one of the Bahamas' triple jumpers can't make the trip to Seoul, Lawrence, who also concluded his track career at BSU this past spring, could still see his Olympic dream fulfilled.

Muse, Young and Jacoby must make the U.S. team at the Olympic Trials in Indianapolis July 15-23 in order to make the trip to Seoul.

Muse, a three-time All-American — twice in the shot put and once in the discus — suffered a broken bone in his right (throwing) wrist during the outdoor track season and didn't have the cast removed until June.

Young, who completed her junior year at BSU, finished second in the heptathlon at this year's NCAA meet to become Boise State's first NCAA Division I All-America female athlete. With her runner-up effort, Young qualified for the Olympic Trials. Currently, the Walnut, Calif., native is ranked ninth in the nation. Three heptathletes and one alternate will make the trip to Seoul.

Like Muse, Jacoby is coming off an injury that could hurt his chances to make the U.S. team. Jacoby, the 1984 NCAA high jump champ, pulled a hamstring this past winter and has been slow to recover. His best high jump is 7-7, which is currently sixth best in the nation.
resources. "I don't know why we have that responsibility," he remarks. "It's like telling everybody where your favorite fishing hole is. Pretty soon it can't be enjoyed by anyone."

Currently managed by the U.S. Forest Service, the Sawtooth area, which was designated a national recreation area (NRA) in 1972, would be placed under the auspices of the National Park Service if it becomes a national park. That would be another mistake, Noh contends. "The Park Service is primarily and historically oriented toward single use [recreation]," he says. "There are all kinds of implications that flow from that in terms of range, timber and wildlife management. These are the sort of things that basically are not a strong aspect of Park Service management."

Noh, a Republican from Kimberly, says the Park Service does "a very good job managing large amounts of people," but doesn't function in the best interest of mining, logging, grazing and agriculture. Furthermore, he notes that some hunting, off-road vehicle and outfitters and guides groups also oppose Park Service management of the backwoods. "I've received very strong comments in favor of Forest Service management as opposed to Park Service management from outfitters and guides in the Jackson, Wyo., area," Noh says. "They talked about the extreme difficulty in attempting to take people into the backcountry under National Park Service management."

Conversely, the Forest Service's management performance in the SNRA has not received rave reviews. In fact, Craig says that complaints regarding the service's handling of the area, such as unkempt campgrounds and inadequate trail maintenance, were among the reasons for the formation of the advisory board. "Since [the Sawtooths] became an NRA and while I have been over there, I have sensed that I could see . . . a progressive degradation of some of the resource, what appeared to be a product of mismanagement," he states. "It is interesting that my interest in the area and the formation of this [advisory] group and the intensity with which I focused on the area has caused some things to happen already."

One of the "things" to which Craig refers was an internal management audit that the Forest Service recently conducted in the Intermountain West region. The congressman says he does not believe it was "a unique coincidence" that the Forest Service should "all of a sudden" carry out an in-house audit. "To their credit they have come out exposing some of their scabs and some of their wounds and have said very honestly that they do have problems, and that those problems are, in part, a product of management and resource — budget resource primarily," Craig says.

According to Ed Waldapfel, public information officer for the Sawtooth National Forest, the Forest Service conducts management reviews each year on various subjects such as grazing, fisheries and NRAs. "The fact is, preparations for the scheduling of the national recreation area reviews here in the Intermountain region took place as early as December 1985," he remarks.

Waldapfel says the Forest Service welcomes input from groups such as Craig's committee. "We're not satisfied with where we feel we need to be," he adds, "and the whole purpose of that [internal] review is to take a look at what we have done and what we need to improve. Those management reviews that we conduct are very critical; we are our own worst critic and our report certainly reflects that."

Freemuth says there is a conceptual as well as a management problem created by the Forest Service's administrative role in the SNRA. "If the area has special qualities related to recreation, visitors and so on, why does the Forest Service manage it?" he asks. "If the Forest Service does manage it, why not give the Forest Service management control of all the national parks?"

It's apparent the Sawtooth issue is a matter of importance to many Idahoans. It's equally evident that spokesmen such as Noh and Freemuth who present their sides with intelligence and conviction have the state's best intentions at heart. Maybe that is why neither side can win — or lose.
Birds and Bullets

By John H. Keiser
President, Boise State University

Conservation or exploitation? That dichotomy has been a constant theme in American history. When the specific issue is more complex than the observer’s mind, or when there are preconceived political or economic conclusions, the solution can be oversimplified and destructive.

Unfortunately, the developing discussion between those people concerned about the raptor population in the Snake River Birds of Prey area south of Boise and those with interests in military training, especially the more effective use of tanks by the National Guard at Gowen Field, uppermost in mind, has overtones of an unnecessary altercation.

Properly managed and maintained, the land can support both birds and bullets. It has for many decades. The desire of the military to increase its activities is important to the state’s economy. Given their proximity to the World Center for Birds of Prey in Boise, however, those activities also increase the likelihood that the Pentagon or the Sierra Club will step in prematurely and increase frustration.

Positive resolution requires goodwill, great attention to detail by those most knowledgeable, maximum on-site leadership, effective decision-making by all involved parties and a commitment to perpetual monitoring and study.

One model for study and decision-making is that used by the Boise Future Foundation. It is based on the concept of carrying capacity, and surely everyone will admit that the land in question has a point of maximum usage. The proper people, experts representing major interested parties, while granting the predominance of the Bureau of Land Management and the National Guard, could form a technical assessment committee to draw a carrying capacity line. If the committee produced two lines, at least the area of difference could be isolated and solutions sought to specific problems between the lines.

This type of cooperatively produced study better informs decision-makers. Premature decisions or independent investigations conducted by opposing sides will be routinely rejected by the other and prejudices will never be reasonably addressed.

Among other topics, this approach would encourage the military to speak to whether or not they are employing maximum use of simulation-training techniques, closely related to modern warfare and not overtly destructive to the environment. The public has a legitimate positive interest in both. The approach would present the conservation forces with an opportunity and an obligation to publish just how their situation is improving or deteriorating over time.

Simultaneously, the public could weigh the economic and the environmental costs and participate, in an informed fashion, in a discussion about an area that has been of great long-standing concern to them.

To the credit of all parties, continuing, but informal, discussions have been going on for years among truly caring people. In order to keep the decisions where they should be, these discussions should be formalized and produce written, monitored results.

Boise State University has a real interest in both the birds and the bullets. The university claims some credit for bringing the World Center for Birds of Prey to Boise and admits to a great deal of pride in its raptor biology program. BSU is also the only campus with an Army Research Institute in residence, which focuses on improved military training methods. Of course, we are very proud of the Gowen Field Education Center and the fine relationship we have there.

The university can, and should, provide an objective forum for issues such as birds and bullets. Further, the university has the capacity to establish a dedicated laboratory for use by all interested parties to study and to monitor the environmental situation in the future. The university can supply students from its own ranks, or encourage students from around the nation to assist in ongoing observation and study.

There is a natural interest in expanding the university’s library and developing a computerized data base available to all concerned with the area now under debate. To compile the data base, students would be involved with the Army Research Institute, and perhaps the ROTC, as well as with the biology department. The university realizes that it is not in the decision-making line in matters of ultimate importance to the Bureau of Land Management or the Guard, but it is the university’s function to educate and to inform everyone.

It is fair to say that the interest of the public is in accommodating both birds and bullets. It is in no one’s interest to have the symbol of an extinct raptor on a military shoulder patch, or to shut down a military operation, or limit its effectiveness because of uninformed biases.

A reasoned approach will not let that happen if we provide a structure within which it can be exercised.
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Home Monthly Payment $ Social Security Number
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