

# THE WILDLIFER

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THE WILDLIFE SOCIETY

*Excellence in Wildlife Stewardship Through Science and Education*

Issue No. 261

## International Wildlife Management Congress Generates Enthusiasm and Optimism

The International Wildlife Management Congress was a great success, with over 500 participants from nearly 70 countries attending the 7-day conference in San Jose, Costa Rica, September 18-25, 1993. The Wildlife Society co-sponsored the event along with 33 other organizations, including universities, government agencies, and international and national conservation societies. TWS served as the secretariat and played a vital role organizing and planning the Congress. Participants praised the meeting's organization and the content of the scientific sessions and workshops. Registrants participated in seventeen sessions and workshops as well as 16 associated meetings throughout the week. Public interest was sparked by such topics as ecotourism and legal aspects of wildlife management, stimulating media coverage from local and international press.



*TWS President Salwasser addresses IWMC plenary session*

The Congress served as a forum for participants with a diversity of perspectives to discuss international strategies for implementing sustainable development plans to benefit world wildlife resources. Hal Salwasser, President of The Wildlife Society emphasized the theme of the Congress, "Integrating People and Wildlife for a Sustainable Future" in his opening plenary session address, advocating that wildlife managers take the lead in shaping policies, incentives, and strategies for sustainable development (See **President's Corner** for text of speech). Keynote speaker Norman Meyers, acclaimed international conservationist and winner of the 1992 Volvo Environmental Prize, won praise not only for his speech urging wildlife scientists to use their expertise to assist developing countries to develop sustainably, but his "enlightening" delivery (a power outage left him without lights or microphone!).

Many Congress participants praised Costa Rica as a world model for its conservation efforts. Nearly 28% of the country is included in a system of national parks, refuges, and reserves. Costa Rica is respected as a trend setter for other nations that also are struggling to achieve a balance between preservation and development.

The steering, program, logistical, and local host committees made outstanding contributions to the overall success of the Congress. The Editorial Committee now is compiling the nearly 200 papers presented into a comprehensive proceedings that should be published in early 1994.

A full report on the Congress will appear in the *International Wildlifer*, a new feature of *The Wildlifer*, planned for the January-February 1994 issue.



## PRESIDENT'S CORNER

### THE ROLE OF WILDLIFE MANAGEMENT IN SUSTAINABLE DEVELOPMENT

*(President's Address to the International Wildlife Management Congress, San Jose, Costa Rica, September 20, 1993.)*

Wildlife management is essential to the future health of earth's ecosystems and to the future well being of the people who live in those ecosystems. This may strike you as a trite message for an international audience of wildlife managers. But given the challenges humans face in sustaining the development of communities and economies while protecting the resilience and productivity of the ecosystems upon which those communities and economies depend, I think it is not as trite as may seem at first glance. In this address I offer some reasons why I believe the responsible management of wildlife resources by professionally trained scientists and managers is key to sustainable development.



**Hal Salwasser**

#### An Historical Perspective on People and Land

Improving the harmony and balance in relationships between people and the rest of nature is one of the aims of sustainable development as envisioned by the world's leaders at Earth Summit in June 1992. In the long sweep of human history we can recognize four phases in these relationships (this is oversimplified, of course, but a useful framework nonetheless):

- (1) a subsistence phase in which people live tight on the land, depending on and revering the wild plants and animals and natural materials they use daily for food, clothing, shelter and commerce;
- (2) a development phase in which people change the character of land and resources to promote crops, livestock, timber, energy, or minerals and industries they need to support communities and economies at densities a natural ecosystem could not support;
- (3) a protection phase in which people restrain the negative effects of subsistence and development activities in order to maintain or restore the long-term productivity of soils, waters and biotic resources or the essential character and function of particular ecosystems; and
- (4) a synthesis phase in which people attempt to blend and balance subsistence, development and protection in order to sustain or enhance (a) their material well being, and (b) healthy, resilient and productive ecosystems that supply all the requisites of life on earth.

These four phases -- subsistence, development, protection and synthesis -- are not independent. Nor do they evolve in a linear fashion from one phase to the next, never to return to the former. They are interwoven within any culture. And each phase is championed by certain elements of that culture, often in a competitive way. Important to my message on the role of wildlife management in sustainable development is that major challenges humans face in crossing the threshold of a new

millennium are exposed in understanding some ramifications of each phase.

The first of these challenges has to do with subsistence: humans are biological beings. We use space and resources to exist. We strive, as do all biological beings, to grow, prosper and leave offspring. The more successful we are at this the more space and resources we use. And the more wastes we produce for the ecosystems we live in to decompose and recycle. When we lack the technologies, affluence or health care needed to coerce ecosystems to support higher densities of humans we live in a subsistence and often spiritual relationship with nature. Certain individuals and communities in all nations still lack the ability or have no desire to escape this subsistence relationship.

As humans acquire the means to break free of a subsistence relationship (through agriculture, health care and industrial technologies), ecosystems and natural resources are developed to support higher densities of people. (It is hard to determine which is the chicken and which the egg in this relationship.) In essence, the human population escapes its natural and variable balance of population and environment by creating an induced relationship that can be maintained only by continued management and development of environments and resources.

This development then creates the second challenge: population growth. Population growth can only occur by directing increasing amounts of earth's space, soils, waters, air and biotic production to the service of human livelihood or by gaining efficiencies in the use and reuse of the fruits of development. Without conservation of resources and efficiencies in the use of space, the larger the human population the less space and resources are available for each person and for all the other things that occupy this planet.

#### The Population Dilemma

Let us consider a few ramifications of the population challenge. During the past 300 years -- a blink of the eye in the time Earth has supported life -- our species has increased its population size eleven-fold and greatly expanded its impacts on Earth's ecosystems. We have gone from about 500 million to 5.5 billion people.

In terms of potential space available, this means that the amount of earth per person is now only one ninth what it was in the year 1700. To accommodate or propel this growth, wetlands have been drained; prairies have been put under the plow; forests have become farms and cities; lakes and oceans have been fished out and turned into sewers; rivers have been dammed and diverted; wildlife species have been constricted, restricted and extirpated; mountains have been mined and drilled. These development activities were not necessarily or even primarily unthinking or malicious acts against nature. They were actions taken to meet the needs of a growing population that had its focus on subsistence and development ahead of protection, probably because the earth was so abundant relative to population size and its impacts until the past century that protection was not deemed necessary in many (but certainly not all) places.

This is no longer the case. Development is essential because it is unlikely that earth could support 5.5 billion or more people living as subsistence hunters and gatherers. But development has now tamed, polluted and converted the home places of so many wild plants and animals that accelerated loss and diminishment of biological diversity threatens the security of

*continued on Page 66*



## Reports from Sections, Chapters, and Members

TWS members interested in helping to establish a **Radio Telemetry Subgroup** within the GIS & Remote Sensing Working Group should attend the GIS & Remote Sensing Working Group Meeting on Monday, December 13, 1993, at the Midwest Fish and Wildlife Conference in St. Louis, MO, or call Jane Austin (701/252-5363) for more information. The group also may consider formation as a separate Working Group.

**Wildlife Nutrition Working Group:** a new Working Group on wildlife nutrition is now forming. If you are interested in helping to organize this group or to learn more, please contact Nancy Conklin at 617/495-9070, FAX 671/496-8041, or E-mail (nonconklin@husc4.harvard.edu).

An informal organizational meeting of the **Biometrics Working Group** was held by Mike Conroy at the Southeastern Association of Fish and Wildlife Agencies Annual Conference in Atlanta, Georgia, on October 13. Two additional meetings are being planned. The first will be held by Scott Winterstein at the Midwest Fish and Wildlife Conference in St. Louis, Missouri, December 12-15, 1993. Check the message board at the meeting for an announcement. The second will be held by Ken Williams at the Northeast Fish and Wildlife Conference in Burlington, VT, May 1-4, 1994. Further details in a future issue of *The Wildlifer*.

**Douglas E. Runder** recently left Florida, where he coordinated population surveys for the state's Nongame Wildlife Program, to fill a newly created "Research Wildlife Biologist" position with Weyerhaeuser's Environmental Forestry Department in Washington.

After 17 years on the faculty at the University of Wyoming, **Mark S. Boyce** has accepted a new position as the Vallier Chair of Ecology at the University of Wisconsin - Stevens Point.

## New All-Time Boone & Crockett Records Book Available Now

Eight new World's Records are highlighted in the 10th edition of the Boone and Crockett Club's all-time records book, **Records of North American Big Game**. New rankings for more than 12,700 big game trophies will list the top animals in 36 categories. Each listing contains the final score, world ranking, name of owner and hunter, key skull or rack measurements, and place and year of kill. Studio photos of the World's Records and number two trophies in each category are featured. More than 150 field and studio photographs will be included in this 624-page hardcover book. To order send \$49.95 (US) plus \$3.00 shipping (\$4.00 Canada/foreign) per book: Boone and Crockett Club at Old Milwaukee Depot, 250 Station Drive, Missoula, MT 59801; 406/542-1888; FAX: 406/542-0784.

## Seventh National Wild Turkey Symposium CALL FOR PAPERS

The Seventh National Wild Turkey Symposium, sponsored by the National Wild Turkey Federation, US Forest Service, South Dakota Game, Fish and Parks Dept., and other conservation partners, will be held in Rapid City, SD, May 23-27, 1995. The symposium and resulting proceedings will be the seventh in a series in which theoretical and applied research information on

biology and management of the wild turkey is presented. Papers for presentation at the Seventh Symposium will be selected by a Program Committee from those abstracts submitted for consideration. Abstracts of no more than one page in *Journal of Wildlife Management* format are due by 31 March 1994 to the Proceedings editor: Dr. James G. Dickson, USFS Wildlife Habitat Lab, PO Box 7600 SFA, Nacogdoches, TX 75962.

## Agroforestry Symposium Scheduled for August 1994

*Agroforestry and Sustainable Systems*, a symposium designed for researchers, practitioners, technical specialists, and educators, will be held August 7-10, 1994, in Fort Collins, Colorado. It will focus on how trees, integrated into sustainable agricultural land-use systems in the semiarid west, will enhance agricultural productivity, natural resource conservation, and natural and human environments. For more information contact Kim Isaacson, USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Center for Semiarid Agroforestry, East Campus-UNL, Lincoln, NE 68583-0822; 402/437-5178, ext 13.

## FOR SALE

**JWM** (1972-88); **WSB** (1972-92); **W. Monographs** 20-98. Shipping costs only. Contact Jeff Greene, 3291 N. Sandstone Road, Jackson, MI 49201; Phone: 517/780-7904.

**JWM** Vols. 47-57 (1983-93, missing 1 issue); **W. Monos.** 83-123; **WSB** Vols. 7-8 (1979-80), 11-21 (1983-93, missing 1 issue). **Tax deductible proceeds to Ashley Straw Memorial Fund.** Send offer to David Dolton, USFWS, 11500 American Holly Dr., Laurel, MD 20708-4016, or call 301/498-0306.

## 1994 Submission Deadlines for The Wildlifer

If you would like to submit a news item, a meeting announcement, or job opening for publication in *The Wildlifer*, please mail it by the deadlines listed below to: Yanin M. Walker, Production Editor, The Wildlife Society, 5410 Grosvenor Lane, Bethesda, MD 20814; phone 301/897-9770; FAX: 301/530-2471.

<u>1994 Issue</u>	<u>Deadline</u>
January-February	Dec. 13, 1993
March-April	February 11, 1994
May-June	April 11, 1994
July-August	June 13, 1994
September-October	August 15, 1994
November-December	October 10, 1994



## TWS San Joaquin Valley Chapter Offers Research Grant

The San Joaquin Valley Chapter of The Wildlife Society is offering a \$500 grant for wildlife research in California's San Joaquin Valley and adjacent mountains. Research should concentrate on wildlife ecology, physiology, or behavior. Send research proposals, resume, by January 1, 1994 to: **TWS San Joaquin Valley Chapter, P.O. Box 14046, Pinedale, CA 93650.** Grant will be awarded by March 1, 1994.

## Applications Solicited for Sigurd Olson Common Loon Research Award

LoonWatch is accepting applications for its eighth annual awards for research on common loons in the Western Upper Great Lakes region of the United States and Canada. To apply for cash awards up to \$1,000, a brief description (maximum 10 pp.) of the proposed research program and curriculum vitae should be submitted by the principal investigator to: **Terry Daulton, Coordinator, LoonWatch, Sigurd Olson Environmental Institute, Northland College, Ashland, WI 54806.** Proposals must be received by January 10, 1994. Proposals by students should be accompanied by two letters of recommendation. The award will be granted on the basis of the project's potential to better understand and manage Upper Great Lakes populations of common loons. Guidelines for applicants are available from LoonWatch.

## Chevron/Times Mirror Magazines Conservation Awards Program

### CALL FOR NOMINATIONS

The nation's oldest and most prestigious conservation awards program has expanded as Times Mirror Magazines joined Chevron Corporation in co-sponsoring the Chevron/Times Mirror Magazines Conservation Awards Program. Nominations to recognize the conservation accomplishments of individuals, public agencies, and environmental organizations throughout North America are now being accepted through December 31, 1993. Please submit one letter of nomination that describes the nominees achievements in detail, plus two endorsement letters and a brief biographical sketch. Individuals from both the public and private sectors are eligible for the program. The categories for nomination are: Citizen Volunteer, Conservation Professional, and Organization or Public Agency. For more information on the nomination process or to submit a nomination write: **Chevron/Times Mirror Magazines Conservation Awards, P.O. Box 7753, San Francisco, CA 94120-7753.**

## Distinguished Moose Biologist Award CALL FOR NOMINATIONS

The Distinguished Moose Biologist Award was established by the North American Moose Conference and Workshop in 1981 to honor and bring to the public's attention, the outstanding contribution of a particular individual, individuals, and/or organizations to moose management. Nominations should be submitted by March 15, 1994. For award criteria contact: **Murray W. Lankester or H.R. (Tim) Timmerman, Dept. of Biology, Lakehead Univ., 855 Oliver Road, Thunder Bay, ON CANADA P7B 5E1.**

## Eighth Biennial Symposium of the Northern Wild Sheep and Goat Council

### PROCEEDINGS NOW AVAILABLE

The proceedings of the Eighth Biennial Symposium of the Northern Wild Sheep and Goat Council are now available and can be ordered by sending \$20.00 (US \$) check or money order, made out to NWSGC to: Kevin Hurley, 1992 Conference Chair, Northern Wild Sheep and Goat Council, c/o Wyoming Game and Fish Dept., 932 Arapahoe, Thermopolis, WY 82443-2115; Phone: 307/864-9375.

## Fifth International Symposium on Society and Resource Management

### CALL FOR PAPERS

The Human Dimensions in Natural Resources Unit at Colorado State University is hosting this symposium on June 7-10, 1994 on the campus of Colorado State University. The symposium will embrace a wide variety of topics, but its main focus is on improving the utility of social science for natural resource managers and policy makers. Concurrent paper and poster sessions, plenary theme addresses, dialogue sessions, field trips and receptions are planned. Those wishing to present a paper or poster at the conference should submit abstracts no longer than two double-spaced, typewritten pages by November 22, 1993 to Michael J. Manfredi, Program Chair, Human Dimensions in Natural Resources Unit, Colorado State University, Fort Collins, CO 80523. FAX: 303/491-2255.

## 30th Annual North American Moose Conference and Workshop

### CALL FOR PAPERS

You are invited to submit a paper for presentation at the 30th Annual North American Moose Conference and Workshop, hosted by the Idaho Department of Fish and Game, March 27 - April 1, 1994, in Idaho Falls, ID. The workshop theme will include population relocation, managing ecosystems, and hopefully, diseases of moose and managing multi-ungulate ecosystems. Please use letter gothic 12 pitch standard type, and if possible, submit a 3.5" diskette that is compatible with WordPerfect/WP Windows. Three copies of your manuscript written in *Journal of Wildlife Management* style will be required at the time of conference registration. All papers will be peer reviewed and published in *ALCES*, Volume 30, 1994. The deadline for submitting abstracts is January 31, 1994. Send to: **LLOYD Oldenburg, ID Dept. of Fish and Game, Box 25, Boise, ID 83706. 208/334-2921; FAX 208/334-2114.**

**STILL AVAILABLE:** *ALCES Supplement (1), 1992* which contains the formal papers presented at the 3rd International Moose Conference in the former Soviet Union. Send \$30.00 (US) to the above address for each copy ordered.

### ERRATA

The recipient of the TWS University of Maine Chapter's Wildlife Student Award is **Timothy Irvin Foster** (July-August *Wildlifer*).



## TWS AWARDS - CALL FOR NOMINATIONS

### CONSERVATION EDUCATION AWARD

The Wildlife Society is now accepting nominations for the **1994 Conservation Education Award** in the category of "Writings." The Conservation Education Award encompasses the broad field of renewable resources conservation and management, but wildlife is expected to be the focus of nominated works. The award will be presented to authors, editors, or publishers of books, a series of articles, or other written material that effectively conveys sound conservation concepts to the public. The written material could encompass text books, compilations, bulletins, or purely popular writings as well as outstanding philosophical/interpretive contributions. Up to two awards may be given in this category, one for books and one for articles.

A nomination statement and 8 complete copies of the materials should be sent to the following address: **Cynthia Wong-Leonard, Siuslaw National Forest, Box 1148, Corvallis, OR 97339. 503/750-7000.** The additional copies are necessary to facilitate timely review of nominations by the judging committee. All nominations must be received no later than **15 March 1994**, but submittals should be made as early as possible to permit adequate review. The nomination statement should include a point of contact and commercial phone number, and name and affiliation of nominee.

### GROUP ACHIEVEMENT AWARD

The Wildlife Society's **Group Achievement Award** recognizes an organization or group that accomplishes outstanding achievements to benefit wildlife consistent with and/or assisting in advancing the objectives of The Wildlife Society. The organization or group selected for the award can be a private, state, or federal institution.

Past award winners have included: Texas Utilities System of Dallas, Texas; National Wild Turkey Federation; Wildlife Research Section of the Colorado Division of Wildlife; National Audubon Society; the Interagency Scientific Committee to Address the Conservation of the Northern Spotted Owl; and the Kenai Moose Research Center. Nominations should describe the group, its objectives, number of members, and provide a concise statement of accomplishments within the past 3 years. Nominations must be received prior to **10 March 1994**. Please send nominations to: **Rollin D. Sparrowe, Chair, Group Achievement Award Committee TWS, Wildlife Management Institute, 1101 14th Street, NW, Ste. 801, Washington, DC 20005; 202/371-1808.**

### WILDLIFE PUBLICATION AWARDS

Nominations are solicited for 4 categories of publications: article, monograph, book (single or multiple authors), and, editorship (multi-authored worked with one or more persons as editors). Publications must be scientific writings that present original research or thought, have a high scholastic standard in the manner of presentation, be published in a standard outlet, and have a publication date of 1989 or later. Fisheries works are not eligible. Research or management oriented publications dealing with the conservation of wildlife within the natural environment are sought. Textbooks, compilations or purely popular writings do not qualify, nor do purely taxonomic, anatomical, or physiological treatments. By **15 March 1994**, send nominating letter and seven (7) copies of each publication nominated to: **Publications Awards, The Wildlife Society, 5410 Grosvenor Lane, Bethesda, MD 20814-2197.**

### JIM McDONOUGH AWARD

Nominations are being sought for the **1994 Jim McDonough Award**. The Jim McDonough Award was created to recognize certified wildlife biologists who are not only members at the chapter, section, and Society levels, but who have made significant contributions to the wildlife profession. The criteria is: (1) a member of The Wildlife Society and a member of the respective Section and Chapter, if any, in which that individual resides; (2) a Certified Wildlife Biologist; (3) a person who has made, or is making, a significant contribution to the wildlife profession by being an active member/participant of The Wildlife Society, especially at local levels (i.e., Chapter and Section). The individual must have made (or is still making) contributions that reflect well on professional biologists through program implementation and development of new techniques or approaches in an area, state, province, or other similar geographical area. The person should be the kind recognized by his fellow workers as a solid contributor but who has gone without major awards, citations, or prominent recognition.

The recipient will receive a suitable plaque and a monetary award of up to \$500. Please send the nominee's full name, present position, address, and phone number, nominator's and endorser's names, addresses, and phone numbers, and a clear and concise statement justifying the nomination by **15 March 1994** to: **Kent C. Jensen, CEWES-EN-S Environmental Lab, USAE Waterways Exp. Station, 3909 Halls Ferry Road, Vicksburg, MS 39180-0610; 601/634/3047.**

### HONORARY MEMBERSHIP AND SPECIAL RECOGNITION SERVICE AWARD

**Honorary Membership** in The Wildlife Society is intended to recognize continuous outstanding service in any area or areas of concern to The Wildlife Society. Any practicing or retired wildlife professional who is a member of The Wildlife Society and has made continuous valuable contributions to the wildlife profession over a long period of time is eligible for nomination.

The **Special Recognition Service Award** honors any person or group who has made an outstanding contribution to the wildlife profession; the general areas of wildlife conservation, management, or science; or a specific area of endeavor, species, community, ecosystem, region, etc. In addition, any person or group who has made such a noteworthy contribution in a discrete area over the short or long term is eligible for nomination for a Special Recognition Service Award.

Because the Honorary Membership and Special Recognition Service Award Committee confers 2 types of awards, nominators must specify that the nomination is for Honorary Membership **OR** for a Special Recognition Service Award, **NOT** for both awards. Nominations should include: (1) nominee's full name, present position, address, and phone number; (2) nominator's and endorser's names, addresses, and phone numbers; (3) a clear and concise statement justifying the nomination, including the specific nature, time and place of the nominee's outstanding service and accomplishments. Address such criteria as difficulty, insight, scope, importance, acceptance, application, value, impact, and geographic scope of contributions; (4) at least 3 signed statements of endorsement. Before **15 March 1994**, send all nomination materials to: **Brad Bortner, 18214 NE 125th Way, Brush Prairie, WA 98606. 206/231-6164; Fax: (206) 231-2364.**



## Wildlife Policy Activities

### TWS Report Calls for National Wetlands Policy

Contentious debate over future wetlands policy again has flared up across the country, especially on Capitol Hill, as lawmakers wrangle with reauthorization of the Clean Water Act. The Wildlife Society last year formed the Committee on Mitigation Banking and Wetlands Categorization to prepare a technical review of banking and categorization concepts and current practices and to recommend a course of action to help resolve the ongoing conflicts involving wetlands protection policy. The Committee has drafted its report, calling for a national policy on wetlands protection and management; it has been accepted by Council, and the document is undergoing final review and editing. Meanwhile, TWS has submitted the draft as preliminary testimony for two important federal wetlands hearings on 15 and 28 September before Senate and House committees.

The Wetlands report asserts that massive, historical losses of wetlands, the diversity and importance of wetland functions, and the inherent value of these functions to society mandate a national policy of net gain or net recovery of wetlands. The Committee recommends a landscape approach to wetlands permitting, evaluating "whether or not we can afford to lose a wetlands, not whether or not the wetlands can be replaced." Recommendation also is made for expanded planning-level assessment by state and federal agencies working in cooperation with private landowners to:

- 1) Improve and standardize application of current knowledge relevant to wetland evaluation;
- 2) Encourage multi-disciplinary approaches to wetland protection/management;
- 3) Encourage systems approaches to wetland protection/management;
- 4) Improve agency consistency in the wetland permit review process; and
- 5) Provide advance warning of wetland areas that will require extended review and mitigation.

The Committee further stresses that substantial funding, especially from public/private partnerships, must be provided to acquire the scientific and technical knowledge (currently lacking) needed for development of sound and responsible policies and regulations. The report will be published during fall/winter 1993 and will be available from The Wildlife Society.

### "Takings" Legislation

Joining 26 other organizations in cosigning a letter to Rep. George E. Brown, Jr., Chairman of the House Science, Space, and Technology Committee, The Wildlife Society strongly opposed "takings" legislation. Proposals for "takings" legislation are designed to allow classification of a wide range of effects of current and proposed environmental, worker safety, and public health laws and regulations on private property as "takings" of that property under the Constitution. Some such proposals

seek to codify President Reagan's 1988 Executive Order 12630, which requires reviews of proposed regulations, ostensibly to avoid actions that may result in a taking of private property under the Fifth Amendment. The Congressional Research Service has found that the order (and, hence, the proposals built thereupon) is based on a severely flawed interpretation of the takings clause of the Constitution and an erroneous interpretation of the Supreme Court decisions on regulatory takings.

Rep. Billy Tauzin (D-LA) has repeatedly (so far, unsuccessfully) attempted to add takings provisions to the authorization bill for the National Biological Survey (NBS). Tauzin's legislation would mandate compensation to a landowner whose property's value decreased 50+% as a result of a federal action based upon NBS data.

### Forest Legacy Funding

TWS also cosigned with 10 other groups a letter to Sen. Robert C. Byrd and others on the Interior Appropriations Subcommittee urging strong funding for the Forest Legacy Program (FLP). The FLP is a cooperative State/U.S. Forest Service program that works with willing private landowners, primarily in the northeastern U.S., to protect the conservation values on their lands, threatened by conversion to non-forest uses under urban development pressures. FLP emphasizes "working forests" -- forests that are critical to the traditional culture and economy of rural communities. Since initial funding of FLP in FY 92, eight states have established their participation in the program, and nine others, plus Puerto Rico, are seriously considering adopting FLP. The "Burton Amendment" to the House version of the Interior Appropriations bill eliminates all FLP funding. The Senate version proposes \$6.9 million in funding, sufficient for only those states currently active. TWS and the cosigners urge a funding increase to \$10 million to allow more states to participate and to demonstrate the effectiveness of and strong federal support for the program.

### New Jersey Assumption of CWA §404 Proposed

In June 1993 the State of New Jersey submitted to the U.S. Environmental Protection Agency (EPA) its application to assume the Clean Water Act §404 wetlands program. The Wildlife Society urged the EPA to deny New Jersey's §404 assumption request and instead to encourage implementation of state wetlands programs that complement, not replace, current federal protections. TWS has four major concerns regarding the assumption proposal:

- 1) assumption renders Federal laws and procedural protections ineffective in New Jersey. These laws and protections include the Endangered Species Act, the National Environmental Policy Act, the Coastal Zone Management Act, the Fish and Wildlife Coordination Act;
- 2) assumption replaces Federal wetlands programs with state programs more vulnerable to funding cuts and local political pressures;
- 3) EPA's record on state program oversight fails to ensure strong state regulation; and



- 4) approval of New Jersey's assumption request despite programmatic weaknesses creates a harmful national precedent for future state assumption requests.

As presented, the proposal does not ensure protection of federally endangered and threatened species or wetlands protection meeting EPA standards. Lacking are provisions for Endangered Species Act (ESA) §7 consultation with the U.S. Fish and Wildlife Service (USFWS) for wetland permit review; for "... continued coordination with Federal and Federal-State water-related planning review processes" [as required for state assumption under §404 (h) (1) (H)]; and for the additional monetary and personnel support that will be required for strong enforcement. The USFWS has come down strongly against New Jersey's §404 assumption, instead recommending expansion and addition of cooperative wetlands protection programs.

### **Subsistence Hunting of Migratory Birds in Alaska**

The Wildlife Society, in collaboration with TWS Alaska Chapter, has developed and submitted comments on the USFWS's draft Environmental Assessment (EA) on amending the Migratory Bird Treaty with Canada. An amendment, if proposed, primarily would concern control of subsistence hunting of migratory birds in Alaska. TWS commended the USFWS for the intent of the EA and for encouraging local involvement in the issue; however, the EA is technically flawed and incomplete, unnecessarily restrictive in scope, and deficient in impact analysis, precluding a coherent review. For the following reasons TWS requested a redraft and another round of review:

- 1) For procedural reasons, the scope of the document ignores the importance of Canada in sustaining most shared migratory bird stocks and potential harvest impacts in Canada that could flow from the treaty amendment process;
- 2) The current draft EA fails to adequately describe the origin of bird stocks in Alaska and Canada, the degree to which subsistence harvest affects these stocks, and the relationships to harvests further south in all flyways.

Successful amendment of the Migratory Bird Treaty will require thorough description of the affected resources, full and accurate disclosure of potential impacts, and substantial public confidence in a sound approach to negotiations with Canada and regulatory implementation in the U.S.



### **Gray Wolf Restoration in Yellowstone and Central Idaho**

The USFWS for two decades has been considering gray wolf restoration in the West, and the Service has made an important step forward with the completion of its draft environmental impact statement (DEIS) for release and recovery of wolves in the Yellowstone region and Central Idaho. Using TWS's technical review paper and position statement on wolf restoration and collaborating with the Wyoming and Idaho Chapters, TWS prepared and submitted comments on the

DEIS. The Idaho and Wyoming Chapters also submitted separate comments on the DEIS.

In general, TWS supports the concept of restoration of gray wolves in the two regions, using the experimental non-essential populations authority under the ESA. The Society expressed support for Alternative 1 (Preferred Alternative) in the DEIS, which, of the four recovery options presented, would most likely restore wolves in the most scientifically sound, practically feasible, and legally defensible manner. Some modifications should be made, however, to the Preferred Alternative. TWS has recommended reserving land use restrictions as a possible management tool; redrawing of experimental area boundaries to allow proper management of experimental wolves while protecting existing wolves and the areas into which these native animals probably will expand within the recovery period; redrafting of wolf control measures to eliminate killing of wolves on public lands by private lessees and to greatly reduce the reporting time for incidents of killing and harassing wolves; clarifying definitions of terminology, most notably "unacceptable impacts on ungulate populations" and "chronic problem wolves" to avoid conflicts among wildlife managers, livestock owners, and wolf managers over wolf impacts; and possibly delaying reintroduction in Central Idaho until the results of the Yellowstone effort are examined and until a more thorough assessment of a possible naturally colonizing Idaho wolf population has been accomplished.

Overall, the Preferred Alternative for the wolf restoration plan is excellent, but it will require management flexibility. Managers cannot foresee all contingencies, and the USFWS does not expect the restoration to proceed without difficulty, at least initially.

## **THE WILDLIFE SOCIETY**

# **First**

### **ANNUAL CONFERENCE**

**SEPTEMBER 21-25, 1994**

**ALBUQUERQUE, NEW MEXICO**

Featuring technical and poster sessions, workshops, Working Group meetings, student activities, exhibits, and a members forum.

Plan to join us for stimulating sessions that will enhance your technical skills and knowledge amidst the scenic beauty and rich culture of New Mexico.

#### **THEME:**

**EXCELLENCE IN WILDLIFE STEWARDSHIP  
THROUGH SCIENCE AND EDUCATION**

Hosted by the Southwest Section, TWS  
For registration information call (301) 897-9770



## Highlights of the March 1993 Council Meetings

The Wildlife Society Council met on 19, 20, and 22 March 1993 at the Omni Shoreham Hotel in Washington, D.C. The following is a summary of the major actions taken and issues discussed.

### COUNCIL SUBCOMMITTEES

**Planning:** Council approved an initial list of nineteen high priority objectives within Society goals. Action plans for implementing these objectives encompassing current and proposed programs will be developed.

**Fund Raising:** Council approved the following **Contributions Policy:** *It shall be the policy of The Wildlife Society to accept gifts and donations from businesses, industries, organizations, members and nonmembers to support programs and activities established by the Society, provided donors do not unduly influence the pursuit and/or implementation of the Society's mission and goals. Acceptance of gifts and donations by the Society does not mean endorsement by the Society for the activities of the donor.*

**Annual Meeting:** A detailed handbook of goals, division of responsibilities, event specifications, and overall schedule for the Society's annual technical meeting was approved. The meeting will be hosted by a section or chapter of The Wildlife Society on a rotating basis. The 1994 Annual Meeting will be hosted by the Southwest Section in Albuquerque. Annual Meeting Steering and Program Committees will be the workhorses of the effort, guided and assisted by the President, Council, and staff. Within the two committees, several subcommittees will be formed to accomplish specific tasks. Working Groups also will be key players -- conducting technical sessions and workshops.

Installation of new members of Council will occur in the fall beginning in 1994. Officers and section representatives installed/serving at the March 1993 Annual Meeting will continue in their positions until the fall 1994 meeting. In addition, all Society awards normally presented at the March meeting will be shifted to the fall meeting, except the Also Leopold Award presentation will remain at the North American conference.

**Publications:** Council discussed a detailed plan for implementing changes in Wildlife Society publications approved by Council in October 1992. The goal is to diversify the content of the *Bulletin* to satisfy the need of wildlife professionals for information on current management practices and concerns, wildlife policy issues, current conservation issues, and Society news. The format of the *Bulletin* also will be changed to something similar to *Fisheries* or the *Journal of Forestry*. Some of the peer-reviewed articles currently published in the *Bulletin* will be moved to *The Journal of Wildlife Management*. The changes will be made gradually beginning with the first issue of 1994 and completed in 1995. By 1997, it is proposed that the *Bulletin* be issued up to twelve times a year. Council also reviewed draft editorial policies for *The Journal of Wildlife Management* and *Wildlife Society Bulletin* encompassing the changes proposed for the *Bulletin*.

### FINANCES

Council accepted the financial report for 1992 prepared by independent auditors, Gelman, Rosenberg & Freedman.

The Permanent Fund contained \$303,168 as of 1 January 1993. The Revolving Fund for Publications contained \$186,480 as of 6 March 1993. The Building Fund contained \$340,201 as of 1 January 1993. Council approved a revised 1993 budget with

projected income of \$1,060,250 and expenses of \$1,134,800. Council also approved \$1,000 grants to: the Endangered Species (Pesticide) Protection National Symposium and the Sixth Eastern Wildlife Damage Management Conference.

### OPERATIONS

**Membership:** Total membership at the end of 1992 was 8,552, essentially unchanged from the previous year. As of 3 March 1993, membership for 1993 (new and renewed members) had increased 2.5% over the count on 3 March 1992. Council approved retired member status for Bobby G. Alexander, Ralph Andrews, George K. Brakhage, James H. Burbank, James W. Chadwick, Jr., Robert L. Eng, Herman W. Gabriel, James Heintz, Robert G. Hensler, William T. Hesselton, James J. Hubert, Bob Kern, Fred Kindel, William Carl Latta, Richard V. Laursen, Allan L. Lovaas, John W. Mumma, William A. Neitro, Harvey K. Nelson, Thomas F. Newman, Clarence E. Newton, Charles A. Segelquist, Herbert Stern, Jr., Thomas M. Stockdale, Warren H. Taylor, Edward E. Tilzey, and William D. Zeedyk.

**Sections and Chapters:** Council approved revised bylaws for the Southwest Section. As of 11 March 1993, 7 chapter officers, 38 student chapter officers, and 3 faculty advisors were not members of The Wildlife Society -- in violation of Society bylaws. Western Illinois University Student Chapter and the Costa Rica Chapter, are inactive.

**Working Groups:** Council approved eight interim Working Group petitions: Biological Diversity, College and University Wildlife Education, Furbearer, Geographical Information Systems and Remote Sensing, Population Ecology and Management, Wildlife Economics, Wildlife Toxicology, Wildlife Damage Management.

**International Wildlife Management Congress:** Steering Committee Chair James Teer reported that the Congress had been advertised globally, the call for papers received a good response, 24 organizations are cosponsors, and 7 organizations plan to hold related meetings at the Congress.

### PUBLICATIONS

Council appointed Bruce Thompson as editor of the *Wildlife Society Bulletin* (volumes 1994-1995). Staff reported that the 5th edition of the Techniques Manual, entitled *Research and Management Techniques for Wildlife and Habitats*, will be printed late this year. *Absearch*, the computerized database of abstracts/summaries from all *Journal*, *Monograph*, and *Bulletin* articles, is complete and on the market.

### CERTIFICATION AND PROFESSIONAL DEVELOPMENT

Since 1977, 4,401 individuals have applied for certification; of these, 2,394 were approved as Certified Wildlife Biologists, 1,773 were approved as Associate Wildlife Biologists, 144 were denied, and 90 are pending action by the Certification Review Board.

Since the Professional Development Certificate program began in 1989, 85 applications have been received; 72 were approved, 4 were denied, and 9 are pending action by the Professional Development Committee.

Council appointed Ray C. Telfair, II, to the Certification Review Board for a three-year term beginning 1 May 1993.



Council confirmed that they will investigate options for linking the Certification and Professional Development Programs to strengthen both programs.

### WILDLIFE POLICY

**Priority Conservation Issues:** The following list of priority conservation issues was approved for 1993: *First Priority* - 1995 Farm Bill, biological diversity, Clean Water Act reauthorization, ecosystem management, Endangered Species Act reauthorization, federal budgets, old-growth forest management, professionalism in federal agency employment (Office of Government Ethics), wetlands conservation, and wildlife diversity (nongame) funding; *Second Priority* - 1872 Mining Law reform, grazing on public lands, land management planning for USDA Forest Service and USDI Bureau of Land Management, National Wildlife Refuge System management, wilderness management, wildlife damage management, wildlife research priorities and funding, and wolf restoration and management.

Council agreed to wait for the concept paper on the proposed National Biological Survey (NBS) promised by Interior Secretary Babbitt and then develop a response. Some concerns expressed by Council about the National Biological Survey were: 1) the separation of research and management, 2) the need to involve state cooperators in the planning process for NBS, and 3) exclusion of Forest Service biologists from NBS.

**Eastside Forests Scientific Society Panel:** The Wildlife Society-lead panel is making good progress preparing a GIS-based map and report of remaining old-growth forests in eastern Washington and Oregon.

**Technical Review Papers and Position Statements:** The final technical review on *Acidic Depositions: Effects on Wildlife and Habitats* was received from Jerry R. Longcore, chair of the Acid Rain Technical Review Special Committee. It will be revised further and then printed in *The Wildlifer* for comments from the membership. Council heard interim reports from other technical review committees including: Frederic Wagner, chair, Wildlife Policies in National Parks; Jonathan Haufler, chair, Wildlife Management in North American Wilderness; Douglas Slack, chair, Endangered Species Act; Richard Lancia, chair, Wildlife Research; and Douglas Inkle, member, Wetlands Categorization and Mitigation Banking. The Wildlife-Livestock Technical Review Committee was dissolved at its request.

Council approved the request of Eric Kurzejeski, on behalf of the American Archery Council's Wildlife Management Committee, to establish a committee to conduct a technical review on the use of bow hunting as a wildlife management tool.

### **FUTURE MEETINGS**

Council agreed to hold the 1993 Special Council Meeting on September 18-19 (Saturday and Sunday) in San Jose, Costa Rica, just before the International Wildlife Management Congress. Council agreed to hold the 1994 Special Committee Meeting on Friday and Saturday, 18-19 March 1994 in association with the 59th North American Wildlife and Natural Resources Conference at the Egan Civic and Convention Center, Anchorage, Alaska, and to add a day for planning before the meeting (Thursday, 17 March 1994).

### **Highlights of the March 1993 Business Meeting**

The Business Meeting occurred 22 March 1993 at the Omni Shoreham Hotel, Washington, D.C. All members of Council and executive staff were present, as were more than 100 members of The Wildlife Society.

President W. Alan Wentz acknowledged TWS staff contributions in making the Annual Meeting a success and thanked them for their efforts. He introduced Bruce Thompson as the new *Wildlife Society Bulletin* editor for volumes 1994-1995.

Robert Warren, President of the Southeastern Section, presented a check for \$500 to The Wildlife Society as the section's 5th and final installment of its pledge of \$2,500 in support of the wildlife policy program.

There was extensive discussion on the Society's decision to hold a technical meeting separate from the North American Conference. Southwest Section Representative Nova J. Silvy responded on behalf of Council that TWS will still have a strong presence at future North American Conferences. Annual fall meetings will provide an enhanced opportunity for technical presentations that are outside the scope of the North American Conference. In addition, Council anticipates that TWS' Annual Meeting will attract many field-level wildlife professionals who do not typically attend the North American Conference. The Annual Meeting also will be an important forum for Working Groups to sponsor technical sessions at the meeting. Further, the Annual Meeting will provide a greater opportunity for member involvement in TWS affairs. Northeast Section Representative William M. Healy commented that the North American Conference and TWS' Annual Meeting should not compete for registrants because different groups of people will attend the two meetings. The North American Conference primarily is a policy meeting, while the TWS Annual Meeting will be a technical meeting.

In response to a question from the floor, President Wentz responded that Working Groups provide an opportunity for members with shared special interests to communicate and exchange information. Working Groups also will attract new people to the Society and help broaden TWS' membership.

Questions also were asked about upcoming changes in editorial policies for the *Bulletin* and *Journal*, and our Memoranda of Understanding with the USDI Bureau of Land Management and USDA Forest Service. A member asked Council to consider adding a children's book award to our Publications Awards Program.

There was discussion of the proposed National Biological Survey and what role TWS could play in helping to shape the new agency.

John Ratti reported that *Absearch*, a wildlife reference program for personal computers, contains citations and abstracts of all TWS publications from 1937-1992.

Council and staff presented a framed print to Wildlife Policy Director Franklin for his ten years of service to TWS.

President Wentz expressed appreciation to outgoing Certification Review Board member and former CRB chairman Terry W. Little for his six years on the Certification Review Board and recognized outgoing Northeast Section Representative William M. Healy for six years of service on Council.

President Wentz inducted the Society's new officers and members of Council: Hal Salwasser - President, Erik K. Fritzell - President-elect, Rollin D. Sparrowe - Vice President, Ray B. Owen, Jr. - Northeast Section Representative, and Len H. Carpenter - Central Mountains and Plains Section Representative.



**President's Corner...continued from page 58**

both developed and subsistence cultures. Pressure on the land and competition among people for its uses and values must be tempered if future generations are to have an opportunity to achieve their desired levels of well being.

**The Forest Story**

Forests are an illustrative ecosystem. Along with oceans, wetlands and prairies, forests are one of earth's most important ecosystems. They keep air and waters clear; they are habitats for millions of species; they provide fuel, foods, medicines and places for spiritual restoration. In the face of relentless population growth and resource use, the area of global forests has declined by 50 percent since the year 1700, from covering about two thirds to one-third of the land surface of the planet.

On a per capita basis forests have gone from 15 hectares per human to less than 1 hectare. Yet global wood use continues to increase by about 2 percent per year and has sustained that direction for the past four decades. This increase in wood use is not a simple 1:1 response to population growth. Per capita wood use has risen about 15 percent during the past four decades, from 0.6 m<sup>3</sup> green wood per year in 1950, to 0.7 m<sup>3</sup> per year in 1990.

Every global citizen has a hand in wood use and its effects on forests. Canadians and Americans, for example, use more than one-third of worldwide industrial roundwood production each year while people in developing nations use about as much fuelwood as the world's total use of roundwood. The future offers even higher pressures on forests.

The forest story could have been told for wetlands, rivers, prairies or shrublands, perhaps even more dramatically. All these ecosystems are wildlife habitats. Changes in habitats wrought by human population growth directly affect wildlife diversity and abundance and, thus, the overall health of earth's ecosystems. These changes are largely the result of the development phase in human relationships with land and its utility in helping support human population growth and an improved material standard of living.

**Equity and Responsibility**

But while all humans have a hand in causing habitat change, not all people benefit equally from the material results of development. Some humans, maybe 20 percent of the global population, benefit greatly through lifestyles that consume disproportionate amounts of space and resources. Those of us who could afford to attend this congress are probably among them. Others, perhaps another 20 percent, still live in the subsistence phase – some below the margin, some on the cusp of development. Many of these people aspire to a better material standard of living. That means they aspire to a lifestyle that uses more space and resources.

Just as earth probably could not support 5.5 billion subsistence hunters and gatherers, neither could it probably sustain 5.5 billion humans living the current lifestyles of Americans, Europeans, Canadians and Japanese. Major changes must occur in the environmental as well as social effects of development to provide for improved well being of all people. These changes will entail conservation and protection of resources, certainly. They also require attention to social justice and how the benefits and costs of development and protection are distributed.

**Making Choices**

At this point the development phase in human-land relationships hits a three-pronged fork in the road. Along the path of increased development and human use of earth's space and resources lies an immediate enhancement of material life for certain people. Along the path of protection of earth's natural attributes lies a higher likelihood for environmental health and long-term sustainability of diverse and adaptive ecosystems. At the extremes, however, the paths of development and protection become ideological perversions that obscure the middle path, one that combines the benefits as well as costs and responsibilities of protection and development pursued simultaneously and with conscious tradeoffs between them.

Fortunately, or perhaps unfortunately depending on how you view conflict, wildlife and the role of wildlife management are caught in the middle of the ideological extremes. In a world of 5.5 billion people striving to improve their livelihood, neither extreme protectionism or extreme "productionism" will be good for wildlife in the long run or on a global scale. How can this be, you may ask. Surely extreme protectionism can only be good for wildlife, right? Wrong. Again, we return to forests.

Extremes of protection emerge for the most part in well developed, affluent cultures; the rest are too busy trying to survive from day to day or acquire the means of development. If affluent communities protect their forests for wildlife or religious reasons only (as they are doing in the latter parts of this century) yet continue to increase their use of wood (as they are also doing in the latter parts of this century) then whose forests and whose forest wildlife suffer? The wood comes from somewhere (ecosystem rule: everything comes from somewhere). If these affluent people substitute steel, plastics, bricks, aluminum or concrete in place of wood because they can afford to do so, then where does the energy come from? And where do the by products of manufacturing go (ecosystem rule: everything goes somewhere)? It takes about nine times the fossil fuel energy and, therefore, produces about nine times the CO<sub>2</sub> emissions to substitute non wood for wood materials using existing materials and technologies.

**An Ecosystem Perspective on Resources**

Environmental ethics is not found along the extreme protectionist path of no resource use and, thus no resource management, promoted by affluent people to safeguard "nature" in their backyard environments while they savor the material benefits of resources developed or wastes dumped in someone else's backyard. Nor is social justice to be found on this path. But then the same is also true of the extreme development path of no restraint in human uses of land and resources. Development that ignores environmental protection has manifestly demonstrated its ability to destroy the very basis for continued livelihood: productive soils, clean waters, clear air and a rich biota.

The world needs the middle path, one that requires responsible resource management, moderation in resource consumption, equity in sharing the benefits and costs of development and protection and a synthesis of the diverse goals people have for individual well being and healthy environments. Only such a path will offer the best possible long-term future for wildlife.

The world's leaders endorsed the middle path last summer in Rio de Janeiro under the title of sustainable development. Sustainable development aims to meet people's subsistence needs and foster levels of economic development to improve

*Continued on Page 71*





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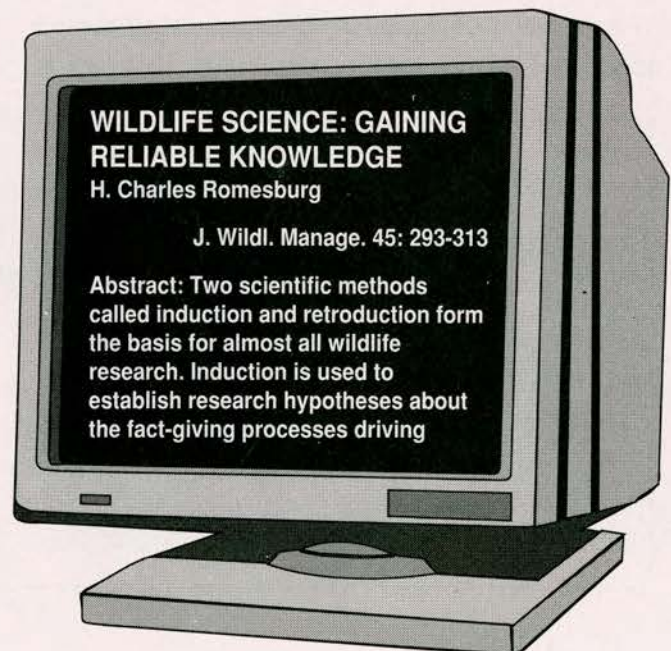
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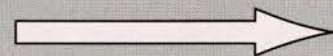
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**PRESIDENT'S CORNER...continued from Page 66**

human well being and social equity while still protecting the integrity of the ecosystems that such well being depends on. But let us not delude ourselves; sustainable development is no easy task. On the social-political front it confronts, head on, the warring extremes of development and protection as well as the need to meet the subsistence needs of a rather large and growing human population. Thus, the goals of sustainable development probably cannot be accomplished without major changes in policies and incentives for human behavior, including moderation in material consumption and waste production by affluent people and technical and financial assistance to people and communities that still strive to reach a decent standard. In other words, sustainable development requires actions to reduce the consumption and waste of affluent cultures while increasing access to resources by less affluent cultures.

### **The Need for Wildlife Management in Sustainable Development**

Wildlife uses and values and, therefore, wildlife management can choose to lead, resist or be irrelevant to sustainable development. I am firmly convinced that wildlife management should choose to lead and play a major role in shaping the policies, incentives and strategies for sustainable development. There are several reasons why this is so.

\* First, wildlife diversity is an essential part of ecosystem health that can no longer be maintained by willful ignorance or passive neglect.

\* Second, subsistence uses of wild plants and animals are significant to the well being of millions if not billions of people and these uses can put enormous pressures on unmanaged populations of wild plants and animals.

\* Third, developed uses of certain wildlife populations provide significant economic benefits where hunting, fishing, viewing or ecotourism bring revenue to land owners or local communities and those uses must be sustainable, that is managed for continued value.

\* Fourth, sustainability of subsistence and developed uses of wildlife depend on scientifically sound and socially acceptable management of habitats, wildlife populations and human uses.

\* Fifth, sustaining diverse and productive wildlife habitats, populations and uses in a world on its way to 9 or more billion people requires active and adaptive management to achieve a judicious blend of environmental protection and economic development.

A diverse and productive future for wildlife and wildlife uses cannot and will not result from management that (1) has a weak scientific basis, (2) does not pay attention to new information or is (3) insensitive to the needs and cultural traditions of people.

This brings me back to the heart of my message to professional wildlifers. Except where people directly care for the lands and resources of their ecosystems (as do farmers, ranchers and foresters for example) wildlife professionals are a culture's wildlife stewards. Whether we practice our craft as teachers, scientists, resource managers, law enforcement officers, guides, business people or policy administrators, we are key players in the success of sustainable development, the fourth phase in the revolving relationship of people with land and resources. This is

true unless, and only unless, we choose to be irrelevant or intransigent resisters.

To build and nurture wildlife stewards as integral parts of sustainable development strategies several things are necessary.

\* People must attain a degree of material well being that allows them to invest in their environment and their future. This is basic.

\* Wildlife uses and values must provide significant and direct benefits to individual livelihoods and economies or they will be cast aside in the struggle for subsistence and development. This means that wildlife uses and values must be integral parts of cultural traditions and economic development and diversification.

\* All human uses of wildlife, whether consumptive, observational or vicarious must reflect an ethic of respect and fair chase.

\* Both government and non government institutions must exist with missions and public support to promote wildlife conservation and ethical use.

\* Local people must be integral in shaping wildlife conservation strategies. To use a basketball metaphor, governments, scientists or elite segments of a society cannot "slam-dunk" a solution down on the heads of local communities and expect it to succeed for very long.

\* National and regional universities must have wildlife conservation curricula so that wildlife stewards are "home grown." A nation will not "own" its wildlife conservation strategy if all the scientists, managers or administrators are conservation mercenaries who bounce from one host country to another.

\* The cadre of wildlife scientists and managers must have effective communication, especially the means of forming and transmitting reliable knowledge, both with their colleagues in the country and around the world.

\* Wildlife professionals must eventually define the standards of their business and develop a level of expertise and service that is recognized and rewarded by their nation's people.

This last point is fundamental. There is only one time-tested measure for determining the value of professional expertise and service and it works worldwide in all cultures. It is actual performance judged against expectations or promises. Therefore, the critical question to wildlife stewards working on sustainable development is this: what must be the results of wildlife management for wildlife diversity and abundance, wildlife uses and values and human well being? Another way of stating this is: what difference must wildlife management make in order for people to see value in it?

### **Wildlife Diversity, Abundance and Uses**

When humans first encounter an ecosystem it contains a mix of species interacting with one another and their environments in patterns and through processes that reflect the life history of the species and the sequence of events and conditions that make the ecosystem what is at any point in time. Whether humans interact with the ecosystem or not it will change over time; its

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**PRESIDENT'S CORNER...continued from Page 71**

species will age, grow, and move around; some new species will appear, some old ones will disappear; stream courses, climates and geology may all change. But invariably, the interaction with humans will induce additional changes.

The more that humans use parts of ecosystems or disrupt certain processes or events, the more profound these changes will be. If humans aspire to keep ecosystems working as close to their natural functions as possible, then the impacts of human activities must be slight. They should not cause soils to erode, waters to become fouled or significantly diverted, or species to disappear from areas where nature would otherwise have them. If increments of the productivity of these "natural ecosystems" are taken for human use, they must be sustainable in that they not cause either the diversity or productivity of the ecosystem to decline over time due to that use. Wildlife management in such natural and semi-natural ecosystems must help sustain the basic character, function and uses of the ecosystems without changing their character in a significant way.

But where humans aspire to sustain densities of people that require substantial change in ecosystems, the tasks of wildlife management and of protecting the integrity of those systems becomes more difficult and the outcomes less "natural". Waters will be diverted, dammed or recycled. Wetlands will be converted or managed for crops. Trees will be harvested and forests replanted. Plants and animals will be taken or farmed for food, medicines and other purposes. Some grasslands and forests will be turned into farms and ranches. Some riparian areas will turn into towns and cities. These will transform places suitable for some kinds of wildlife into places suitable for other kinds. Along the way some species will become extinct before their allotted natural time. At the extremes some places will not be suitable for any wildlife.

The essential task of wildlife managers in such highly developed ecosystems starts with the basics: protect soils, waters and native flora and fauna as much as is possible. Then, encourage the perpetuation of diverse and productive habitats and wildlife populations that are compatible with other land uses. One of the best way to do this is through economic incentives and sustainable uses of wildlife where those are possible. When the protection of soils, waters and native species through incentives and sustainable use is not possible in combination with other human uses of the land then means must be sought to protect basic resources through environmental regulations and protection of unique places as nature preserves.

To operate in heavily peopled places, as we will increasingly do, and accomplish these lofty aspirations wildlifers must be more than good scientists or good managers of habitats and populations. They must also be good communicators, good business people, and good politicians. And they must be comfortable with operating in an uncertain and messy world of change. Being a successful wildlife professional in the coming decades will not be easy. But it will be immensely rewarding if we succeed. In any case, it will be crucial to the future well being of people as well as wildlife.

**Summary**

Let me close by reiterating several points. The world is full of people. Wildlife managers cannot ignore their impacts or their needs. Extreme notions of economic development or environmental protection cannot meet the challenges of supporting human well being in a healthy environment. Only a synthesis of subsistence, economic development and environmental protection can do this. The goal of this synthesis

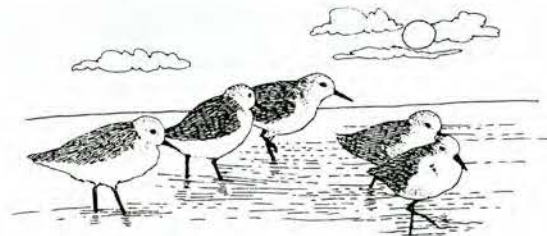
is called sustainable development; the process for achieving the goal requires the prudent management of lands, waters, biota and people as integrated units or ecosystems.

Sustaining healthy ecosystems requires active roles for wildlife management and an array of economic activities based on culturally acceptable wildlife uses and values ranging from subsistence use to hunting to viewing and ecotourism. Not every culture will choose to employ all of these uses or values. Therefore, a professional cadre of wildlifers trained and educated in each nation's cultures is, thus, vital to successful management. Communication and exchange of information and technologies on wildlife conservation must be accelerated. Professional standards must evolve to define the profession. Wildlife management must aspire to sustain as much of the natural diversity and productivity of ecosystems as is possible, not just in places established primarily for the benefit of rare wildlife species but also in places where sustainable and ethical uses of wildlife can become a reason for maintaining productive wildlife habitats and populations.

And, perhaps most importantly, wildlifers must become the champions and designers of sustainable development, ecosystem management and ethical uses of land and resources. Wildlife -- the resource that we here care most about -- will not fare well under extremes of either economic development or environmental protection. Therefore, professional wildlifers must be among those who lead the way in synthesizing subsistence, economic development and environmental protection.

The Wildlife Society is proud to sponsor this important gathering. We come here to learn with you. And we stand ready to help enhance your professional capabilities so that together we can better care for the magnificent wildlife resources that are integral parts of the heritage and legacy of our nations and cultures.

*Note: The statistics on forests and wood use cited in this talk were taken from World Resources Institute reports, FAO reports and work done at CINTRAFOR in Seattle, Washington.*

**THE WILDLIFER**

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## Meetings of Interest

(See previous issues of **The Wildlifer** for additional timely meetings)

### 1993

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|------|-------|--|-----------------|-------|--|
| Nov. | 10-13 | <b>2nd Annual Natl. Watchable Wildlife Conf.</b> , Corpus Christi, TX. (Watchable Wildlife, TX Parks & Wildl. Dept., Urban & Nongame Wildl. Program, 4200 Smith School Rd., Austin, TX 78744.)   | Mar.            | 18-23 | <b>The Wildlife Society Special Council and Related Meetings</b> , Egan Civic and Convention Center, Anchorage Hilton Hotel and Hotel Captain Cook, Anchorage, AK. (H.E. Hodgdon, TWS, 5410 Grosvenor Lane, Bethesda, MD 20814-2197, 301/897-9770.)                                      |
| Nov. | 16-17 | <b>Wildlife Habitat Enhancement Council's Fifth Annual Symposium and Banquet</b> , Radisson Plaza Hotel at Mark Center, Alexandria, VA. (Wildlife Habitat Enhancement Council, 1010 Wayne Avenue, Suite 920, Silver Spring, MD 20910.)   | Mar.            | 22-24 | <b>1994 Wildlands Conference</b> , Houston, TX. (WHEC Wildlands Conf., 736 Company Farm Rd., Aspers, PA 17304; 717/528-7062; FAX 717/528-7544.)  |
| Dec. | 6-10  | <b>Intl. Congress on Modelling &amp; Simulation</b> , "Modelling Change in Environmental & Socioeconomic Systems," U. of W. Australia, Perth. (Intl. Congress Secretariat Prof. Michael McAleer, Dept. of Economics, U. of W. Australia, Nedlands, WA 6009 Australia. 61 9 380 3400. Fax 61 9 380 1016.)     | Mar. 27- Apr. 1 |       | <b>30th Annual North American Moose Conference and Workshop</b> , Shilo Inn, Idaho Falls, ID. (Lloyd Oldenburg, ID Dept. of Fish and Game, Box 25, Boise, ID 83707. 208/334-2921; FAX 208/334-2114.)   |
| Dec. | 11-15 | <b>55th Midwest Fish &amp; Wildlife Conf.</b> , "New Agendas in Fish & Wildlife Management: Approaching the Next Millennium," Regal Riverfront Hotel, St. Louis, MO. (John Smith, Program Comm., Chair, MO Dept. of Conservation, 1110 S. College Ave., Columbia, MO 65201. 314/882-9880. Fax 314/874-8849.) | Apr.            | 18-21 | <b>16th Biennial Pronghorn Workshop</b> , Hospitality House, Emporia, KS. (Keith Sexson, KS Wildlife and Parks, PO Box 1525, Emporia, KS 66801; 316/342-5851; FAX 316/342-6248.)   |
|      |       |  | May             | 1-4   | <b>50th Annual Northeast Fish and Wildlife Conference</b> , "The Public and the Profession: Changing Constituencies, Changing Roles," Sheraton Hotel, Burlington, VT. (Larry Garland, Co-Chairman, VT Fish and Wildlife Dept., 111 West Street, Essex Junction, VT 05442; 802/878-1564.) |

### 1994

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|------|-------|---|------|-------|---|
| Feb. | 8-10  | <b>TWS Oregon Chapter Annual Meeting</b> , "Seeking Common Ground in Natural Resources Management." Sunriver Lodge, Sunriver, OR. (Kate Boula, USFS, Umatilla NF, 503/427-3231.)  | May  | 2-6   | <b>Northern Wild Sheep and Goat Council 1994 Meeting</b> , Inn of the South, Cranbrook, BC. (Anna Wolterson, BC Wildlife Branch, 106 5th Avenue South, Cranbrook, BC, Canada; 604/426-1450.)  |
| Feb. | 18-23 | <b>American Association for the Advancement of Sciences (AAAS) Annual Meeting</b> , San Francisco Hilton and Towers, San Francisco, CA. (AAAS Meeting Office, 1333 H St., NW, Washington, DC 20005. 202/326-6450; FAX 202/289-4021.)  | May  | 15-20 | <b>"Nature Conservation: The Role of Networks,"</b> intl. conf. of CSIRO Div. of Wildl. & Ecol., Centre for Conserv. Biol., Auckland U., W. Australia. (Dr. Denis Saunders, CSIRO Div. of Wildl. & Ecol., LMB No. 4, PO Midland, Western Australia 6056. 61 9 2520111, Fax 61 9 2520134.)   |
| Feb. | 21-23 | <b>17th Annual Southeast Deer Study Group Mtg.</b> , Sheraton Inn, Charlottesville, VA. (W. Matt Knox, VA Dept. of Game & Inland Fisheries, Rt. 6, Box 410, Forest, VA 24551. 804/525-7654. Fax 804/525-7720.)  | Jun  | 7-10  | <b>Fifth International Symposium on Society and Resource Management</b> , Colorado State Univ., Fort Collins, CO. (Michael J. Manfredro, Program Chair, Human Dimensions in Natural Resources Unit, Colorado State University, Fort Collins, CO 80523. FAX: 303/491-2255.)  |
| Mar. | 7-8   | <b>Symposium on the Status and Management of the Forest Grouse of Western North America</b> , Oregon State University. (John Crawford, Game Bird Research Program, Dept. of Fish. & Wildl., Nash 104, Oregon State Univ., Corvallis, OR 97331-3803; 503/737-1971; FAX 503/737-3590.)      | Jun. | 7-12  | <b>Society for Conservation Biology and Association for Tropical Biology Joint Annual Meeting</b> , Guadalajara, Jalisco, Mexico. (E. Santana, Dept. of Wildlife Ecology, Univ. of WI, Madison, WI 53706; FAX 608/262-6099; or Laboratorio Natural Las Joyas, Univ. de Guadalajara, AP 1-3933, Guadalajara, Jalisco, Mexico, FAX 52-338-7-27-49.) |
| Mar. | 8-11  | <b>Management of Marine and Estuarine Shallow Water Habitats in the Mid-Atlantic</b> , Holiday Inn, Atlantic City, NJ. (Ralph Spagnolo, EPA, 215/597-3642; FAX 215/597-7906.)   | July | 11-13 | <b>"SIT '94: Stand Inventory Technologies for Forest Ecosystem Management,"</b> Oregon Convention Center, Portland, OR. (Jennifer McBlaine, World Forest Institute, 4033 SW Canyon Rd., Portland, OR 97221. 503/228-1367. Fax 503/228-3624.)  |
| Mar. | 15-19 | <b>International Symposium on Wildlife Utilisation and Conservation</b> , Cape Sun Hotel, Cape Town, South Africa. (Prof. W. van Hoven, Centre for Wildlife Management, University of Pretoria, Pretoria 0002 SOUTH AFRICA. 27/12/420 2569; FAX 27/12/433 432.)                           |      |       |   |
| Mar. | 18-23 | <b>59th North American Wildlife &amp; Natural Resources Conf.</b> , Egan Civic and Convention Center, Anchorage Hilton Hotel and Hotel Captain Cook, Anchorage, AK. (L.L. Williamson, Wildlife Management Institute, 1101 14th St., N.W., Suite 725, Washington, DC 20005. 202/371-1808.) |      |       |   |

### 1995

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|------|------|---|
| June | 7-11 | <b>Society for Conservation Biology 1995 Annual Mtg.</b> , Colorado State U. campus, Fort Collins, CO. (Richard L. Knight, Dept. of Fishery & Wildlife Biology, Colorado State U., Fort Collins, CO 80523. 303/491-6714.) |
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## ■ Positions Available

**ASSISTANT PROFESSOR WILDLIFE, WATERFOWL/WETLANDS ECOLOGY.** Tenure track position in Wildlife Dept. Requires Ph.D. with expertise in wildlife management. Candidate must demonstrate background in waterfowl/wetland ecology, wildlife management techniques, and research experience in waterfowl/wetland ecology. Instructional duties to include courses in: waterfowl management, wetland habitats, wildlife techniques, as well as other assigned courses. University teaching experience is preferred. The position begins Fall 1994. Submit vita (including reprints), transcripts of academic work, 3 letters of recommendation, and other pertinent materials to: **David W. Kitchen, Chair, Dept. of Wildlife, Humboldt State Univ., Arcata, CA 95521. 717/826-3953. Humboldt State Univ. is an Equal Opportunity/Affirmative Action/Title IX Employer.**

**ASSOCIATE DIRECTOR FOR PUBLIC AFFAIRS.** The Ecological Society of America seeks an individual with proven ability to communicate effectively with persons of diverse backgrounds, and demonstrated public speaking and writing skills to oversee development and maintenance of contacts with the news media, as well as with personnel from legislative and federal agency offices, and nongovernmental organizations. Associate Director also oversees the updating of the Ecological Information Network and plans for the Press Room at the Society's Annual Meeting; serves as editor-in-chief for the Washington Office newsletter. Ph.D. in ecological or biological sciences and at least five years work experience to include familiarity with current ecological theory and practice in the national and international arenas; experience with government and private sector in environmental decision-making; experience with the news media. Send by Dec. 1, 1993, a letter of interest, CV, and 3 references to: **Dr. Anthony Janetos, NASA Headquarters, 300 E Street, SW, Code YSE-P80, Washington, DC 20546. An EOE/AA Organization.**

**BIOLOGICAL SCIENCE TECHNICIANS (45-55).** GS-7 (\$10.89/hr), GS-5 (\$8.78/hr), & GS-4 (\$7.85/hr) for 3-6 months. Waterfowl/nongame avian/vegetation/wetland studies in ND, SD, MN, OR, ID, NV, and Sask. or Man., Can. Most begin between 15 March and 15 May. Possible censusing/evaluating nesting success of prairie birds, radiotracking waterfowl or predators, trapping and nest searching, vegetation analysis, aquatic sampling, etc. Rigorous field work, long hours, & operation of 4x4 vehicles. Send SF-171 (rev. ed. dated 6/88) and copy of coll. trans. or OPM form 1170 to: **Sheryl Hanson, USFWS, Rt. 1, Box 96C, Jamestown, ND 58401. Contact David Fellows 701/252-5363. Appl. must be dated and postmarked between 11/16 and 12/31/93.**

**CONSERVATION SCIENTIST I-IV** for the Texas Parks and Wildlife Department. Assists with wetlands research, management, development and public use of various management areas, and with wetlands baseline inventories, vegetative type mapping and water level monitoring. Collects, records, and analyzes biological data regarding habitat

and wildlife species. Serves on the Region alligator species committee. Assists private landowners with proper wetlands management initiatives. Qualifications: Degree in Wildlife Science, Wildlife Management, Wetlands Ecology, or closely related field, plus experience in application of wildlife management principles and techniques, technical writing and implementing programs dealing with wildlife management. Salary: \$3,063/month. For further information and application forms, contact: **Texas Parks and Wildlife Dept., Personnel Branch, Applicant Services, 4200 Smith School Road, Austin, TX 78744; 512/389-4545.**

**DEAN - COLLEGE OF NATURAL RESOURCES.** The University of California at Berkeley seeks a candidate with an outstanding record of scholarly achievements in teaching and research, commensurate with appointment to full professorship, and a proven record of successful management and consensus building who will take on the challenge of leading the College through the implementation of a new organizational structure and academic plan, while maintaining a long standing record of excellence in instruction and research. The College of Natural Resources contains four departments: Plant Biology; Environmental Science, Policy and Management; Agricultural and Resource Economics and Policy; and Nutritional Sciences; and a research unit: the Institute for Natural Resource Systems. Opportunities of this position include a period of faculty growth and renewal, a Cooperative Extension program, and a Capital Fund campaign already underway. Applications or nominations should be sent, together with the names and addresses of three references to the following address, no later than January 15, 1994: **Chair, Search Committee for Dean of the College of Natural Resources, Office of the Provost for Professional Schools and Colleges, 200 California Hall, Univ. of California, Berkeley, CA 94720. 510/642-6474 FAX: 510/642-3359. The University of California is an Equal Opportunity, Affirmative Action Employer.**

**EXECUTIVE DIRECTOR.** The Ecological Society of America seeks an individual with proven administrative and leadership abilities, a deep understanding of the science of ecology and its relevance to society, and a commitment to advancing the role of ecology in decision making. The Executive Director manages the Society's headquarters in Washington, D.C., and will be responsible for business and financial affairs, including membership, subscription, and publication activities; represents the Society to the executive and legislative branches of government, federal agencies, public and private foundations, and the general public; seeks foundation, corporate, and private support to expand Society's programs and to build working capital. Credentials: experienced ecologist with Ph.D. in ecology or closely related discipline and at least 10 years of appropriate professional experience. Strong record of research accomplishment and success in leading scientific organizations.

Send by December 1, 1993 a letter of interest, CV, and names of three references to: **Dr. Ronald Pulliam, Chair, ESA Search Committee, Institute of Ecology, Univ. of Georgia, Athens, GA 30602.**

**ENVIRONMENTAL ATTORNEY** for the Inland Empire Public Lands Council to act as director of the Council's Public Lands Legal Service Program. Will be located at the Seattle office of the Sierra Club Legal Defense Fund for two years, then relocate to Spokane, WA. Duties: represent local activists in litigating selected public lands and environmental cases; assess, with Council personnel and forest advocates, US Forest Service and other agency decisions or actions such as proposed timber sales; conduct three training sessions per year for grassroots activists in the Inland Northwest. Top academic credentials with up to five years of litigation experience with substantial experience in federal court required. Must be admitted to practice in Washington State; excellent writing skills and ability to work closely with volunteer activists and attorneys; familiarity with the National Environmental Policy Act, National Forest Management Act and other applicable laws. Salary \$32,000 - \$37,000 plus benefits. Submit letter, resume, writing sample, and names of references to: **David Crandall, Exec. Director, Inland Empire Public Lands Council, P.O. Box 2174, Spokane, WA 99210; 509/327-1699.**

**FIELD ASSISTANTS (6)** to assist with graduate students on: monitoring birds along the lower Colorado River (Feb-Aug); small-mammal trapping in southern Utah as part of a Mexican spotted owl prey base study (Apr-Aug); bat surveys in Nevada (likely beginning Jan-Feb and continuing through Aug); and other studies in the southwest involving birds, small mammals, herps, and vegetation sampling. Salary \$800-1000/month depending upon project and your experience; housing available at either no or low cost. BS/BA in wildlife, zoology, or related field and previous non-classroom field experience. Applicants for bird-related work must be able to count birds by sight and sound. Harsh field conditions - very good physical condition required. Apply for 1 or all positions, but specify skills in detail. Send letter outlining experience and availability, college transcripts, resume, and names and phone numbers of 3 references to: **Dr. Michael L. Morrison, School of Renewable Nat. Res., 214 Biological Sciences East, Univ. of AZ, Tucson, AZ 85721; no phone calls please.** Possibly, parts of certain projects can be turned into graduate projects; please note any such interest in your cover letter.

**FIELD ASSISTANTS - Maine North Woods (8-10)** needed to work on a study of timberland landscape effects on Neotropical migrant landbirds in the Moosehead Lake region of northcentral Maine. Preference given to applicants with experience in bird identification by sight and sound. Should be capable of accurate censusing and data recording. Experience in behavioral observation, locating nests, bird capture, and banding also desirable, but not essential. Must be in good



physical condition for hiking in varied terrain. Dates: mid-May through mid-August. Salary: \$830 - \$1000/mo., depending on experience. Lodging provided, but at times camping will be necessary at remote census sites. Send letter, resume, and 3 references to: **John M. Hagan, Manomet Bird Observatory, P.O. Box 1770, Manomet, MA 02345; 508/224-6521.**

**FIELD ASSISTANTSHIPS** to study aquatic bird ecology are available with Manomet Bird Observatory beginning 1 April 1994 at heron colonies along the US northeast coast. BS in biology or equivalent work experience. Previous field experience and familiarity with the use of small boats desirable. Swimming proficiency and valid driver's license required. Four-month positions. Salary \$3,000 - \$5,000, depending on experience. Housing at most sites provided. Send resume, course listing, names and phone numbers of two references and description of research interests and experience to: **Amanda C. McColpin, Manomet Bird Observatory, Box 1770, Manomet, MA 02345-1770; 508/224-6521.**

**POSTDOCTORAL RESEARCH ASSOCIATE** to participate in field experiments designed to evaluate the response of hardwood seedlings in bottomland forest to herbivory by white-tailed deer and swamp rabbits. Ph.D. in wildlife ecology or related discipline; experience with live-trapping mammals, radio-telemetry and vegetation analysis is desirable. Preference to applicants with GIS experience, or good field ornithology skills. Salary \$26,000 plus benefits;

renewable with 6% annual salary increase. By 15 January send letter of application, CV, statement of research interests, transcripts and addresses and phone numbers of at least three references to: **Dr. Winston Paul Smith, USDA FS, Southern Forest Exp. Station, Southern Hardwoods Lab, PO Box 227, Stoneville, MS 38776; 601/686-7218; FAX 601/686-2696.**

**RESEARCH BIOLOGIST** for the Michigan Dept. of Natural Resources to conduct research on forested habitat-animal interactions. Permanent position. Minimum of an M.S. degree with thesis, and at least 12 semester credits in modeling and/or statistics including design of experiments. Expertise in habitat modeling and use of GIS. Send resume, references, and transcripts to: **Carl L. Bennett, Jr., MI DNR, Wildlife Division, PO Box 30028, Lansing, MI 48909-7258.**

**RESEARCH TECHNICIANS (3)** to participate in research project mist netting for migrants, searching for nests of breeding species, and vegetation sampling in arroyo-riparian and upland habitat in the Chihuahuan Desert biome (Fort Bliss Military Reservation in south-central New Mexico). Should have interest in learning about birds in a unique environment and not mind working under very hot and dry conditions. Experience in mist-netting, and bird and plant identification of western species is preferable. Duration: 15 February - 15 July 1994 (1); 15 April - 15 July 1994 (1); 1 May - 15 July 1994 (1). \$800.00/month (on site work

vehicle provided). Housing available for approx. \$1.50 - \$2.00/day. Send letter, resume, and names and phone numbers of 3 references by November 20, to: **Jeff Kozma, Texas Cooperative Fish & Wildlife Research Unit, Goddard Building, Texas Tech University, Lubbock, TX 79409-2125; 1-806-742-2851 (leave message).**

**SCIENCE INTERN** sought by the National Audubon Society to work at the Appleton-Whittell Research Sanctuary, an 8000-acre preserve, free of livestock grazing for over 20 years. Interns assist the Research Director, visiting faculty, and graduate students with research projects. Learn the basics of field research, from study design to data analysis. 3-month appointment period; additional 3-month appointments are possible. Transportation on Sanctuary and housing provided (dormitory style). Stipend of \$100.00 per week. BS/BA in the biological sciences required. Good physical condition, cheerful, and willing to work with others. To apply, send letter outlining experience and academic background, resume, a photocopy of your transcripts, and the names and phone numbers of 3 references to: **Dr. Michael L. Morrison, Research Director, Appleton-Whittell Research Sanctuary, Box 44, Elgin, AZ 85611.** No phone calls please; incomplete applications will not be acknowledged.

*Continued on Page 76*

## SPECIAL PREPUBLICATION OFFER ON NEW TECHNIQUES MANUAL

We expect to ship the first copies of **Research and Management Techniques for Wildlife and Habitats** in early January 1994.

This publication will be well worth the wait, with more than 700 pages of text, literature citations (at the end of each chapter), and index. It will appear in the familiar 8-1/2 by 11-inch format, with a new tan, brown, and green hard cover. More than 70 authors produced the 28 chapters in this completely updated and revised version of our familiar techniques manual edited by Theodore A. Bookhout, past TWS President and former Editor of *The Journal of Wildlife Management*.

At this time, the anticipated price of this new techniques book will be in the \$35.00-\$40.00 range. **HOWEVER**, as a TWS member you can purchase one (1) copy at the special, prepublication price of \$30.00 US (\$34.50 U.S. for addresses outside the U.S.) by using the coupon below. This offer expires on 31 December 1993.

### ORDER FORM

*(Mail to: The Wildlife Society, 5410 Grosvenor Lane, Suite 200, Bethesda, MD 20814-2197)*

**Please send me a copy of the new Techniques Manual at the special prepublication price.**

Check enclosed for \$30.00\* US (\$34.50 for addresses outside the U.S.)

Please charge my credit card: Visa  Mastercard  Account No. \_\_\_\_\_

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\* Maryland residents add 5% sales tax.

Offer expires 12-31-93



## POSITIONS AVAILABLE...Continued from Page 75

**WILDLIFE BIOLOGIST** - Assistant Professor, Ph.D. A tenure-track position to begin fall 1994 contingent upon funding. Duties include teaching courses in Wildlife Management, Mammalogy, and Principles of Ecology; establishing an active research program involving undergrad and grad students; seeking outside funding; and participating in the M.S. graduate program. Submit letter of application with statement of research interests, CV, and 3 letters of reference by 1 December 1993 to: **Dr. M.A. Goodrich, Dept. of Zoology, Eastern Illinois Univ., Charleston, IL 61920; 217/581-6388; FAX 217/581-2722.** *Eastern Illinois University is an equal opportunity, equal access, affirmative action employer committed to achieving a diverse community.*

**WILDLIFE BIOLOGIST/PROJECT COORDINATOR** (2-year contract) to perform site visits and written evaluations throughout Southeast, act as liaison between corporation, governmental agencies, conservation organizations, and local landowners; help raise funds, organize seminars, and coordinate wildlife habitat enhancement and restoration efforts in a nationally recognized, voluntary partnership. Degree in natural sciences or related field and documented experience with ecological consulting, management plan creation, community relations, and Southeastern ecosystems. Must be self starter, able to work independently, have excellent communication, people skills, and extensive computer skills. Salary in mid 20's. Start December 1993. Send resume and cover letter to: **Robert M. Ferris, Director of Program Development, Wildlife Habitat Enhancement Council, 1010 Wayne Ave., Silver Spring, MD 20910; 301/588-8994.**

**WILDLIFE TECHNICIAN (2)** to assist in research involving resident and neotropical migrant bird species (bird surveys, mist netting, nest searching, and habitat collection) on Matagorda Island National Wildlife Refuge, TX. B.S. (or in progress) in wildlife or related program. Bird ID by sight/sound and plant ID skills preferred but not essential. Able to work alone and long hours in sometimes adverse field conditions. A good disposition while working under hot conditions essential. Valid state driver's license. March - August (1); May to August (1); \$700/month, housing and health benefits. Send letter of interest, resume, and 3 letters of reference by 8 December 1993 to: **Jerrad T. Van't Hul, TX Coop Fish and Wildf. Res. Unit, TX Tech Univ., Box 42125, Lubbock, TX 89409-2125; 806/742-2851.**

**WILDLIFE RESOURCE MANAGER:** The School for Field Studies seeks to fill full time resident faculty position for field program in KENYA. Starts 1/94. Work in an interdisciplinary teaching team with 32 undergrads on conservation management issues relevant to Wildlife Management. Faculty live on site, participate in daily living with students, teach one and half courses per semester and oversee student directed research projects. Ph.D. preferred in Wildlife Resource Management, Masters with at least 5 years of relevant experience may be substituted, at least two years teaching at the undergraduate level, research experience in East Africa and proven background in conservation management. Experience with sustainable utilization a plus. By Nov. 30, send CV, letter, and references to: **Kenya RM Search, The School for Field Studies, 16 Broadway, Beverly, MA 01915 or fax: 508/927-5127.**

## Graduate Research Assistantships

MS, Wildlife Resources. 2-year study to census bat populations on Ohio River Island National Wildlife Refuge and assess bat habitat use with radio-telemetry. Stipend \$8,940/yr with full tuition waiver. Begin January 1994. By 30 November, send letter of interest, 1-2 page statement of professional goals, resume, transcripts, GRE scores, and 3 letters of recommendation to: **Dr. Petra Bohall Wood, West Virginia University, PO Box 6125, Morgantown, WV 26506-6125; 304/293-3794 ext. 433.**

2 positions, M.S. or Ph.D. to study ecology of swamp rabbits or white-tailed deer in bottomland hardwood forest with emphasis on behavioral response of individuals to the creation of forest opening in relatively large tracts of contiguous forests. B.S. in wildlife ecology or related field; experience with live-trapping mammals, radio-telemetry, GIS, and vegetation analysis is desirable. Choice of several university programs; stipend approx. \$9,500 (M.S.), \$12,500 (Ph.D). By 15 January send letter, resume, research interests and prof. goals, transcripts, and addresses and phone numbers of at least 3 references to: **Dr. Winston Paul Smith, USDA Forest Service, Southern Forest Experiment Station, Southern Hardwoods Lab, PO Box 227, Stoneville, MS 38776; 601/686-7218; FAX 601/686-2696.**



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THE WILDLIFE SOCIETY, INC.**

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