OREGON BIRDS is a quarterly publication of Oregon Field Ornithologists. Oregon Birds is printed at the University of Oregon Press. Membership in Oregon Field Ornithologists is on an annual basis and includes a subscription to Oregon Birds. ISSN 0890-2313

Editor        Owen Schmidt
Issue Editor   Linda Craig
With assistance from
Assistant Editor Sharon K. Blair
Associate Editor Jim Johnson

OREGON FIELD ORNITHOLOGISTS
President       Alan Contreras, Eugene (1988)
Secretary       Kit Larsen, Eugene (1988)
Treasurer       Tom Mickel, Eugene (1988)
Directors       Donna Lusthoff, Portland (1986-88)
                Alice Parker, Roseburg (1987-89)
                Bill Stotz, Ashland (1987-89)
                Larry Thornburgh, North Bend (1986-88)

OREGON BIRD RECORDS COMMITTEE
Secretary       Clarice Watson, Eugene (1987)
Members         Tom Crabtree, Bend (1986-88)
                Jeff Gilligan, Portland (1987-89)
                Steve Heini, Eugene (1986-88)
                David Irons, Portland (1987-89)
                Jim Johnson, Portland (1987-89)
                Larry McQueen, Eugene (1985-87)
                Harry Nehls, Portland (1985-87)
                Owen Schmidt, Portland (1985-87)
                Steve Summers, Klamath Falls (1986-88)
Alternates      Tim Bickler, Lake Oswego
                Jim Carlson, Eugene
                David Fix, Idleyld Park
                Matt Hunter, Roseburg
                Bob O'Brien, Clackamas

OREGON BIRDS
Volume 13 Number 2, Summer 1987

NEWS BRIEFS .......................................................... 123
INFORMATION WANTED ON OREGON'S BIRDS ...................... 132
COLOR-MARKED BIRDS IN OREGON .................................. 138
ERRATA ........................................................................ 141

BIRDING QUIZ: Matchup ................................................. 142
Owen Schmidt

Coastal Canada Geese: A Preliminary Report .................... 143
Roy Lowe

REVIEW: William L. Finley: Pioneer Wildlife Photographer .... 146
George Jobanek

IN MEMORIAM: Bruce L. Van Housen .............................. 150
Barb Bellin

Inventory of Nesting Raptors in Union and Baker Counties, Oregon . 151
Mark Henjum

Winter Habitat Preferences of Northern Harriers on Malheur NWR .. 156
C.D. Littlefield & Steven P. Thompson

Status and Decline of Swainson's Hawks in Oregon: The Role of
Habitat and Interspecific Competition ............................. 165
Stewart W. Jans

A Synopsis of Breeding Bird Studies on Hart Mountain National
Antelope Refuge ......................................................... 179
Ken Vogel & William H. Pyle

Birds of Sycan Marsh, Lake County, Oregon ..................... 184
Mark Stern, Richard Del Carlo, Mark Smith, & Kurt Kristensen

OREGON BIRDS 13(2): 121, 1987
Note from the Issue Editor
I am grateful to Dave Marshall and Collins Hemingway for editorial assistance. Thank you also to Tom Crabtree, David Fix, and Jim Johnson for reading and correcting the manuscripts, to Jim Johnson for typing, and to Kris Elkin for drawing the Site Guide map. Owen Schmidt showed remarkable patience while I learned my job as Issue Editor. Linda Craig.

NEWS BRIEFS

Owen Schmidt, 3007 N.E. 32nd Avenue, Portland, OR 97212

- Make plans now for Oregon's first Shorebird Festival, 21-23 August 1987, in the Coos Bay area. Outstanding shorebird sites in the area include Bandon Marsh, Pony Slough, South Slough, and North Spit. Featured speakers at the Festival include Mike Graybill on coastal water birds, Charlie Bruce on Snowy Plover research, and Dan Varoujean on Marbled Murrelet research. Space on the pelagic trip is limited; lodging is available at the Oregon Institute of Marine Biology. There will be guided field trips and it just so happens that there will be an air show at North Bend on both Saturday and Sunday. For more information, write to Cape Arago Audubon Society, P.O. Box 381, North Bend, OR 97459.

- David A. Anderson reports these 2 Western Gull band sightings: (1) A bird seen at Seaside on 18 December 1982 had been banded near Westport, WA on 11 July 1979 by F. Hosea. The band number (0876-77566) was read by spotting scope. (2) A bird seen at the mouth of the Rogue River on 21 March 1981 had been banded on the Farallon Islands, CA on 15 June 1980 (926-00093). This bird hatched from the second egg of a 3-egg clutch, its female parent was 7 years old at the time, and it was itself a female! Roy Lowe reports these 2 banded bird sightings: (1) A female Cackling Canada Goose marked with a yellow neck collar and banded on 26 July 1985 on the Yukon Delta, AK about 15 miles east of the Bering Sea, seen 11 times on Finley N.W.R. in 1985 and again at Ridgefield N.W.R. in March 1986 and again at the south jetty of Yaquina Bay on 1 November 1986 by Bob O'Brien. (2) A red-collared Tundra Swan marked at Izembek N.W.R. at Cold Bay, AK was seen by Bob O'Brien on 25 December 1986 near the Trojan nuclear power plant. Oregon birders are reminded to send in interesting band returns for publication in Oregon Birds!

- A revised National Geographic Society Field Guide to the Birds of North America should be available about now. The second edition will have several new plates, revisions to additional plates, map changes, and many text changes. A new price has not yet been announced. Plan on purchasing your new edition from OFO as soon as copies are available!

- The 1987 Sanderling/Snowy Plover mid-winter census conducted by The Sanderling Project found 28 banded Sanderlings in Oregon — 10 adults and 18 juveniles. All had been banded in the Oregon Dunes as part of a transplant experiment. The rest of the data is not in yet. Oregon birders taking part in the census included Neil Maine, Mark Graybill, Barb Griffin, Carrie Osborne, and Jim Rogers. For more information on The Sanderling Project, write to them at P.O. Box 247, Bodega Bay, CA 94923.
• Oregon birder Roy Lowe from Newport was elected the Oregon-Northern California representative to the Pacific Seabird Group at its annual meeting in La Paz, Baja California, 10-14 December 1986.

• Portland birder Richard Smith announced a Portland Audubon Society-sponsored birding trip to Trinidad and Tobago 16-28 January 1988. A few of the species to be seen are Tufted Coquette, Bearded Bellbird, Scarlet Ibis, Blue-backed Manakin, and White-fringed Antwren. For details, contact Richard at 12415 N.W. Haskell Court #2, Portland, OR, 97229, (503)643-5096.

• An Endangered Species Act for Oregon has been proposed. Senate Bill 533 has been introduced at the request of the Native Plant Society of Oregon, Oregon Natural Resources Council, and the Oregon Audubon Council. Other supporters include the Oregon Chapter of The Wildlife Society, The Nature Conservancy, and the Oregon Environmental Council. Among other things, the proposed legislation would prohibit the taking of listed plants and animals, establish penalties for violations, require state agencies to exercise their duties consistently with the purposes of the legislation, and authorize recovery programs and acquisition of critical habitat. For information on how you can become involved in supporting passage, write to Sara McEvoy, NPSO State Legislative Chair, 3290 S.W. Willamette, Corvallis, OR 97333.

• A nongame funding proposal to acquire wildlife habitat and promote research and recreation for nongame wildlife is now pending in the Oregon legislature. HB 2883 would impose a 2 percent “mitigation fee” on plastics. Plastic objects such as 6-pack rings, nets, and monofilament would be labeled as harmful to wildlife. For information on how you can become involved in supporting passage, write to Sara Vickerman, Regional Program Director, Defenders of Wildlife, 0434 S.W. Willamette, Corvallis, OR 97333.

• Oregon State University Press has announced the publication of William L. Finley: Pioneer Wildlife Photographer, by Worth Mathewson. Over 200 photographs from all phases of Finley’s life are reproduced. The text tells the story of Finley’s life and offers an assessment of his achievements. Finley is perhaps best remembered for his bird photographs, which he and Herman Bohman took between 1900 and 1908. These include photographs of seabirds (which helped persuade Theodore Roosevelt to name Three Arch Rocks as the first West Coast bird refuge), and a historic series on California Condors (which many believe have never been bettered). The book is available in many bookstores, or directly from Oregon State University Press by sending $29.95 (plus $1.50 postage and handling) to 101 Waldo Hall, Corvallis, OR 97331.

• If you find a Peregrine Falcon eyrie this nesting season, and if you believe that it may be endangered and that it should be watched, contact the Santa Cruz Predatory Bird Research Group (Peregrine Fund), Lower Quarry, U.C.S.C., Santa Cruz, CA 95060, (408)429-2466.

• Oregon birder Range Bayer (Newport) reports quite a number of requests for reprints of his and Jan Krabbe’s article appearing at OB 10(2): 115-125. One request came from Australia! This is the result of OB being abstracted in Recent Ornithological Literature, which is published simultaneously as a supplement to Auk (American Ornithologists’ Union), Ibis (British Ornithologists’ Union), and Emu (Royal Australian Ornithologists Union). The RAOU joined with the AOU and BOU just this year. Oregon Birds contributors can be assured that their work will be widely publicized!

OREGON BIRDS 13(2): 124, 1987
• The International Year of the Raptor will run from March 1987 through April 1988, as proclaimed by the World Working Group on Birds of Prey. An extensive educational campaign to protect raptors worldwide in conjunction with conservation groups internationally is planned.

• The Oregon Eagle Foundation (OEF) is a newly-formed organization created to ensure that the Bald Eagle population in Oregon is adequately monitored and that nesting and wintering habitats are protected. They publish a semi-annual Newsletter with information on eagles around the state and are looking for Regional Reporters to compile Bald Eagle sightings by county. For more information, write OEF, or for a Newsletter subscription, send $10 to Oregon Eagle Foundation, 5873 Estate Drive, Klamath Falls, OR 97603.

• The Purple Martin Conservation Association has been formed. It is a nonprofit organization dedicated to the conservation of Progne subis through scientific research, management techniques, and public education. Through its Colony Registration Program and nest-record card scheme it will attempt to coordinate the management efforts of North American Purple Martin house "landlords." For information, write to James R. Hill, III, Executive Director, P.O. Box 178, Edinboro, PA 16412, (814)734-4903.

• The Malheur Field Station Newsletter has appeared. A quarterly, the Newsletter will keep Field Station members and friends informed of events and announce future activities. For more information, write to Lucile A. Housley, Executive Director, Malheur Field Station, P.O. Box 260-E, Princeton, OR 97721.

• Look for the new journal Bioacoustics, due for its inaugural issue this fall. It will feature natural sounds. "Offers of high standard original papers and other contributions for future issues" are now invited. Write to the managing editor Ron Kettle, British Library of Wildlife Sounds, The British Library, 29 Exhibition Road, London SW7 2AS, England.

• The late William W.H. Gunn’s sound collection has been donated by his wife Lucie Gunn to the Library of Natural Sounds at Cornell University’s Laboratory of Ornithology. The work of a lifetime, more than 3500 recordings are included. Copies of archived sounds are available from the Library on audio cassettes or 1/4-inch reels. Rates are $10 for the first half hour and $7.50 each additional half hour, plus postage, handling and materials. For archived recordings at the Library of Natural Sounds, write to Greg Budney, Assistant Curator, Library of Natural Sounds, Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850, (607)255-4337.

• Parus International, “a newsletter devoted to information on studies of the world’s chickadees, tits, and titmice” has appeared. It is published at the University of Wisconsin, and intends to provide a forum for communication among the world’s Parus researchers. For a copy, write to Dr. Millicent S. Ficken, Department of Biological Sciences, University of Wisconsin-Milwaukee, Milwaukee, WI 53201.

• The International Council for Bird Preservation (ICBP) announces its Wings Across the Sea program. Associate members are entitled to a 15 percent discount on ICBP publications. Other membership classes have higher fees and better benefits. "ICBP is devoted entirely to the conservation of birds and their habitats. Founded in 1922, it pioneered the cause of nature conservation worldwide. Since then, ICBP has grown into a federation of over 300 member organizations representing some ten million people in 100 countries." For more information, write to ICBP, 801 Pennsylvania Avenue S.E., Suite 301, Washington, D.C. 20003.

• Not all the good ideas have been used up. NARBA, the North American Rare Bird Alert, sells T-shirts with these slogans: Dendrocopos are over my head and Pterodromas are far out. Western Field Ornithologists sells one reading Going on pelagic trips is a wet, cold, miserable, nauseating, frustrating, exhausting job, but somebody has to do it! What is your favorite birding T-shirt or bumper sticker slogan? Send it to the Editor (anonymous or otherwise) and watch this space! For information on NARBA, write to Pam and Bob Odor, Bob-O-Link Inc., P.O. Box 1161, Jamestown, NC 27282; for Western Field Ornithologists, write to the editor, Philip Unitt, 3411 Felton Street, San Diego, CA 92104.

• The Wilson Ornithological Society will celebrate its centennial in 1988, and asks everyone to look for materials related to the history of the WOS. A display of items such as old photos, letters, artwork, advertisements, banquet favors, lapel pins, etc., will be shown at next year’s meeting. Contact Jerome A. Jackson, Chairman, WOS Centennial Committee, Box Z, Mississippi State, MS 36762.

• The Institute for Field Ornithology, part of the University of Maine at Machias, announces its 1987 workshops: advanced field identification, bird & nature photography, shorebirds, seabirds, raptors at Cape May. Workshops are very limited in size. For more information write to the University of Maine at Machias, 9 O’Brien Avenue, Machias, ME 04654.

• The North American Loon Fund has completed its eighth year of operation and has installed a new executive director. For a free copy of the NALF 1986 annual report, write to them at Rt. 4 Bx. 240C, Meredith, NH 03253.

• The Newburyport Birders’ Exchange Newsletter will cease publication at the end of 1987, according to its publisher Ed Mair. The Newburyport Birders’ Exchange focused on birders using personal computers. "We think, perhaps, NBE has fulfilled its role in helping bird observers make the transition to personal computers. We understand that the American Birding Association is getting more involved with PC activity and this should become a resource for NBE members," according to Mair. Oregon Birds readers will recognize Ed Mair as author of A Field Guide to Personal Computers for Bird Watchers and Other Naturalists, published by Prentice-Hall in 1985.
• Bird photographers should know about *The Natural Image*, a newsletter that features “articles that are more in-depth and factual to photographers specializing in nature subjects. And we have no advertisers, so when it comes to the shortcomings of a particular product, we can advise you of the negative as well as the positive attributes.” Past articles have included slide storage, telephoto lenses and techniques, Fresnel concentrated flash, and bird photography. For more information, write to Lepp & Associates, P.O. Box 6240, Los Osos, CA 93412.

• The Nature Conservancy announces a number of summer field trips to destinations including Saddle Mountain, the southern Siskiyou Mountains, the Trout Creek Mountains, the Willows, and Cascade Head. For more information, write to The Nature Conservancy, Field Trips, 1234 N.W. 25th Avenue, Portland, OR 97210. Linda Craig will lead a field trip to the Disaster Peak and Mahogany Ridge wilderness study areas 3-7 July 1987. For more information, write to the Portland Audubon Society, 5151 N.W. Cornell Road, Portland, OR 97210.

• Kirtland’s Warbler tours, for birders visiting upper Michigan, run from mid-May until 4 July each year. At Grayling, contact the District Office of the Michigan Department of Natural Resources (517)348-6371; at Mio, contact the District Ranger Station of the Huron National Forest (517)826-3252.

• The death of Jim Lane has been announced. He was the author of the excellent “Lane guides” to many of North America’s best birding locations.

• Running tally of the birds of the rare bird phone network:
  - Rusty Blackbird, 14 February 1987, female on Sauvie Island, Multnomah Co., by Jeff Gilligan;
  - Ross’ Gull, 18 February 1987, winter adult, south jetty of Yaquina Bay, Lincoln Co., by Harry Nehls, until at least 2 March;
  - Magnificent Frigatebird, 4 March 1987, adult female, near Yachats by Martha Sawyer; 7 March 1987, second-year juvenile, at the Charleston boat basin, Coos Co., by Wendy Williams; 9 March 1987, Charleston boat basin, by Ben Fawver;
  - Common Grackle, 1 May 1987 (possibly seen first on 29 April), 1 male with Brewer’s Blackbirds, near the W. Lane Co. Department of Forestry headquarters building near Veneta, by Tom Mickel; and
  - Hooded Oriole, 2 May 1987, 1 male at a feeder in Klamath Falls, Klamath Co., by Steve Summers.

**POSITIONS AND OPPORTUNITIES**

• Malheur National Wildlife Refuge is looking for volunteers to assist in its biological programs from March through September. Volunteers are needed for a wide variety of tasks: collecting waterfowl nesting data, duck pair counts, breeding bird surveys, rabbit counts, Common Raven nest surveys, colonial waterbird nest surveys, Golden Eagle nest surveys, dove coo counts, waterfowl brood counts, duck banding, aquatic plant surveys, botulism monitoring, coyote scent station surveys, vegetation monitoring, vegetation mapping, vegetation use surveys, weekend visitor reception, and data summary and analysis. There may be opportunities for independent research projects. Furnished housing is available for 1 to 2 volunteers at a time. A minimum commitment of 4 weeks is needed, and applicants with a background in natural resources and wildlife are preferred. Write for an application form to Refuge Manager, Malheur N.W.R., P.O. Box 245, Princeton, OR 97721, (503)493-2323.

• Approximately 20 volunteer positions are open in spring/summer/fall 1987 at the Southwestern Research Station of the American Museum of Natural History in Portal, Arizona. The volunteer program offers students in the biological sciences outstanding opportunities to become involved with scientists doing field research. Food and lodging at the Station are provided to volunteers in exchange for 4 hours per day of routine work chores, leaving other time free for research activities. Contact the Resident Director, Southeastern Research Station, Portal, AZ 85632, (602)558-2396.

• One or 2 salaried research positions for work in Quintana Roo, Yucatan Peninsula, are available August 1987 to April 1988. Research is focused on habitat use of migratory birds. Good birding ability and netting experience or botanical background is necessary. Send applications with information about background, career goals, and 2 references to Russell Greenberg, National Zoological Park, Smithsonian Institution, Washington, D.C. 20008, (202)673-4781.

• Experienced raptor observers are needed to conduct daily migration counts 15 August to 5 September 1987 atop the remote 9000-ft. Goshute Mountains, Elko Co., Nevada. Sixteen or more species and 8-10,000 individuals are expected. The wilderness setting includes a spectacular panorama, and applicants must be prepared to backpack into the study site and camp primitively for the duration. Approximately $20-25 per diem available. Send resume and inquiries to Stephen W. Hoffman, P.O. Box 1382, Albuquerque, NM 87103-1382.

• The U.S. Fish and Wildlife Service has about 150 openings for volunteers in Alaska from mid-May to September. Arrangements are possible for longer periods. Almost any occupational specialty is needed, with locations scattered throughout the state. Contact Bill Knauer, U.S. Fish and Wildlife Service, 1011 East Tudor Road, Anchorage, AK 99503.

• Volunteers are needed as site attendants to assist with Peregrine Falcon release efforts in 1987. Each site will be staffed by 2 people for a period of 8-10 weeks. Information and application blanks may be obtained by writing to The Peregrine

**OREGON BIRDS 13(2): 128, 1987**
MEETINGS

• A weekend workshop on sound recording will be held at San Francisco State's Sierra Nevada Field Research Station 19-21 June 1987. Sponsored by the Nature Sound Society, the workshop will feature Greg Budney and Dave Wickstrom from Cornell University's Library of Natural Sounds. Paul Matzner, Nature Sound Society, Oakland Museum, 1000 Oak Street, Oakland, CA 94607, (415)273-3884.

• The 1987 meeting of the Cooper Ornithological Society will be held 21-26 June and will be hosted by Utah State University at Snowbird, Utah. Special features will be a workshop on telemetry and tram rides to the top of Hidden Peak at 11,000-ft. For more information contact the program chairman Martin G. Raphael, U.S. Forest Service, 222 South 22nd Street, Laramie, WY 82070. The 1988 meeting is tentatively scheduled for Monterey, California (Asilomar) in mid-March. Announcements will be mailed to members, and more information will follow.

• The Animal Behavior Society will meet in Williamstown, Massachusetts, 21-26 June 1987. Write to the chairman of the local committee, Lee Drickamer, Department of Biology, Williams College, Williamstown, MA 01267.


• A North American Breeding Bird Atlas Conference will be held 9-10 August 1987 in conjunction with the AOU meeting in San Francisco. Various topics relating to atlases will be addressed by invited speakers. The keynote speaker will be Raymond O'Conner of the British Trust for Ornithology. For more information, write to Sally Sutcliffe, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850, (607)255-4763.

• The 105th Stated Meeting of the American Ornithologists' Union will be held 10-13 August 1987 in San Francisco, CA. Greg Budney and Jim Gulledge of Cornell University's Library of Natural Sounds will be present to discuss sound recording. If attending the AOU meeting, leave a message at the message board.

• Western Field Ornithologists' 1987 annual meeting will be held at Western Washington University at Bellingham on 20-23 August 1987. More details will appear in Western Birds. Possible topics include bird distribution and identification, and breeding bird atlases. Contact T.R. Wahl, 3041 Eldridge, Bellingham, WA 98225, (206)733-8255.

• The third North American conference on loon research and management will be held in cooperation with Cornell Laboratory of Ornithology 18-19 September 1987, in Ithaca, NY. Contact Scott Suttcliffe, Cornell Laboratory of Ornithology, 159 Sapsucker Woods Road, Ithaca, NY 14850, (607)255-4288.

• The Western Bird Banding Association will hold its 1987 meeting in Tucson, Arizona, 9-11 October. The meeting will emphasize techniques useful to field biology with workshops on special methods of netting, trapping, marking, aging, laparotomy, cloacal lavage, tissue and blood sampling, etc. Details from Stephen M. Russell, Department of Écol. & Evol. Biology, University of Arizona, Tucson, AZ 85721.

• The Western Raptor Management Symposium and Workshop, organized by the National Wildlife Federation and the Idaho Chapter of The Wildlife Society, will be held 26-28 October 1987 in Boise, ID. Topics include the status of western raptors and their habitats, land-use affecting raptors. Contact National Wildlife Federation Institute for Wildlife Research, Department 162, 1412 Sixteenth Street, N.W., Washington D.C. 20036-2266, (703)790-4264.

• The Raptor Research Foundation will hold its annual meeting 28-30 October 1987 at the Red Lion Riverside Hotel, Boise, ID. The meeting will feature a symposium on the migration of raptors in western North America. Deadline for abstracts will be 31 July. For information, contact Rich Howard, Conference Committee Chairman, U.S. Fish & Wildlife Service, 4696 Overland Road, Room 576, Boise, ID 83705, (208)334-1888.

• The 88th Christmas Bird Count will be held Thursday 17 December 1987 through Sunday 4 January 1988, inclusive. The 89th CBC will be held Friday 16 December 1988 through Tuesday 3 January 1989, inclusive. The 90th CBC will be held Saturday 16 December 1989 through Tuesday 3 January 1990, inclusive.
• The Pacific Seabird Group will hold its annual meeting 16-20 December 1987 at Asilomar near Monterey, California.

• A symposium on Habitat Management for Migrating and Wintering Waterfowl in North America will be held 24-28 January 1988, in Jackson, MS. For information, contact Wintering Waterfowl Symposium, Department of Range & Wildlife Management, P.O. Box 4169, Texas Tech University, Lubbock, TX 79409.

• A North American Wood Duck symposium will be held in conjunction with a combined Atlantic and Pacific Flyway Council Technical meeting 20-22 February 1988. Write to Leigh H. Fredrickson, Gaylord Memorial Laboratory, University of Missouri, Puxico, MO 63960.

• Cooper Ornithological Society will hold its 58th Annual Meeting at Asilomar, CA 18-21 March 1988. A symposium on food exploitation by terrestrial birds will be held in conjunction with the annual meeting. The design and analysis of studies exploring how birds exploit food resources will be presented.

• The Wilson Ornithological Society will hold its Centennial Meeting at Rosemont College in suburban Philadelphia, PA 9-12 June 1988.

• The American Ornithologists' Union will hold its 106th stated meeting in Fayetteville, Arkansas, 15-18 August 1988.

INFORMATION WANTED ON OREGON'S BIRDS

Note to OB readers: OB will publish information requests that may be of interest to Oregon's birders. The ending notation in brackets shows the first issue of OB in which the request appeared.

Oregon Field Ornithologists' logo. The OFO Board of Directors is searching for an official logo. Everyone with artistic talent and interest is invited to submit their creation to the OFO Board before the next annual meeting, sometime in spring 1988. A new logo will be chosen by balloting at that time. Steve Heinl, without intending to design a logo, was kind enough to draw the Western Meadowlark OFO has been using on letterheads. Steve's meadowlark will be an automatic entry. [OB 13(2)]

Oregon Field Ornithologists, P.O. Box 10373, Eugene, OR 97440.

Deschutes National Forest birds. The Deschutes NF has been developing a computerized data base of observation records for wildlife seen within the Forest. I would greatly appreciate the help of birders in supplementing our records. If you have birded within the Deschutes NF or plan to—I would like to know: (1) species and number of individuals recorded; (2) date observed; (3) geographic location as precisely as possible; and (4) indication of breeding (e.g., nest, offspring, etc.). Information is especially needed for the more uncommon species (e.g., Northern Goshawk, etc.), species on the margin of known ranges, or species of localized occurrence. I have observation forms if you prefer, and a copy of your records would also be satisfactory. This information will be used by our biologists to identify important habitat. [OB 13(2)]

Ed Styskel, Forest Wildlife Biologist, Deschutes National Forest, 1645 Highway 20 East, Bend, OR 97701, 388-8567 or 389-0245.

Oregon park and wayside birds. The Oregon Parks Division asks for your help with natural history inventories. Bird lists are needed to make maps of bird habitats in state parks in the Lakeview, Klamath Falls, and Lincoln City areas. Data will be collected on migrants, residents, and species that nest within park boundaries. In Klamath and Lake Cos., the master planning process has started for these parks: Collier Memorial and Jackson Memorial; for these waysides: Beaver Marsh, Klamath Falls-Lakeview Forest, Chandler, and Booth; and for the Goose Lake Recreation Area. On the north coast, the master planning process has started for these state parks: Devil's Lake and Fogarty Creek; for these waysides: H.B. Van Duzer Forest Corridor, Roads End Beach, "D" River, and Gleneden Beach. Maps and additional details are available. Deadline is 1 July 1987 for the areas in Klamath and Lake Cos., and 1 August 1987 for those in the Lincoln City area. [OB 13(2)]

Marjorie Willis, Oregon State Parks, 525 Trade Street S.E., Salem, OR 97310, 378-6290.

Oregon birds in the neotropics. Anyone with information on the natural history of Oregon birds in the neotropics, please contact me regarding information for a forthcoming issue of Oregon Birds. Also, anyone interested in a birding trip to southern Mexico and Guatemala next winter...
Passerine nesting success. An apparently drastic reproductive failure of many species of passerine birds was documented in 1986 over most of northern California and at least coastal Oregon and Washington. We are trying to accumulate information across the continent on the reproductive success of passerine birds in 1986 as compared to previous years. Negative information (no difference) is especially important. Please send information on species, exact geographical location, manner in which productivity was measured, 1986 results, and results from previous years. [OB 13(1)]

Tom Love, 8060 S.W. Churchill Court, Tigard, OR 97224

Seton paintings. I am preparing an inventory of paintings by Ernest Thompson Seton. If you know of any original artwork, I would appreciate the following: subject matter, date, signature, location, reference if published, size, and medium. [OB 13(2)]

R. Bourns, 115 Main Street S., Georgetown, Ontario, Canada L7G 3E5.

Common Loons. Information is requested on sightings of Common Loons in Oregon. The Northwest Ecological Institute is studying pre-breeding behavior and possible nesting in the state. Dates and locations of gatherings of Common Loons or observations of pairs or fights from February through May anywhere in Oregon (including offshore), would be greatly appreciated. Also new and old records of Common Loons seen on freshwater lakes in Oregon from late May through August would be of great interest. [OB 13(1)]

Char Corkran, Vice President/Treasurer, Northwest Ecological Research Institute, 13640 N.W. Laidlaw Road, Portland, OR 97229, 643-1349 or 645-4751.

Trumpeter Swans. The Trumpeter Swan Society is looking for sightings of Trumpeter Swans anywhere in Oregon outside the usual nesting area in Harney Co. Information needed is good location data, date, time of day, and behavior — and your name, address, and phone number. Please note neck collar information, date of sighting, location of sighting, and the presence of other swans. [OB 13(1)]

David Paullin, P.O. Box 113, Burns, OR 97720

Coastal swans. The U.S. Fish and Wildlife Service is attempting to determine Tundra and Trumpeter Swan use areas on the Oregon coast.
Information needed is good location data, date, time of day, behavior, and age if possible. Look for neck and leg bands. [OB 13(1)]

Roy Lowe, U.S. Fish and Wildlife Service, Marine Science Center, Newport, OR 97365, 867-3011 ext. 270.

**Coastal Canada Geese.** The U.S. Fish and Wildlife Service is attempting to determine Canada Goose use areas along the Oregon Coast. Observations of any subspecies of Canada Goose including the introduced Great Basin Canada Goose are needed, but especially of Aleutian and Dusky Canada Geese. Record date, location, time of day, and subspecies. Look for neck collars and leg bands. [OB 13(1)]

Roy Lowe, U.S. Fish and Wildlife Service, Marine Science Center, Newport, OR 97365, 867-3011 ext. 270.

**Inland Ruddy and Black Turnstones.** Please send all inland records of both Ruddy Turnstone and Black Turnstone. Include good location data (including county), dates, observer's name, etc. [OB 13(1)]

David A. Anderson, 6203 S.E. 92nd Avenue, Portland, OR 97266

**Three-toed Woodpecker nest locations.** I am conducting a research project, funded by the Oregon Nongame Checkoff Program and the U.S. Forest Service, on Three-toed Woodpeckers in Oregon. Please notify me of (1) any nests located during 1982-1987, and (2) any sightings during the winter months (October-March) of any year. Information should be as specific as possible. [OB 13(2)]

Rebecca Goggans, Wildlife Biologist, c/o ODF&W, 61374 Parrell Road, Bend, OR 97702, (503)388-6363.

**Yellow-billed Cuckoos.** Oregon Department of Fish and Wildlife biologists did not find Yellow-billed Cuckoos in the summer of 1986 and no one else reported any, either. See OB 12(2):70 for an interest announcement. We are repeating that announcement for 1987. Yellow-billed Cuckoos prefer willows with a cottonwood overstory, particularly large old-growth stands. They feed primarily high in the cottonwoods and are usually secretive and quiet. Their calls are loud and distinctive though and they are most often noted by their response to taped calls. They respond best when the recorder is played very loud. Play the calls once a minute for about 10 minutes then move about 200 yards and repeat. They respond during the period 20 June to 1 August, and the later in the season the better the response. Cuckoos are not very territorial and even when active respond only about half the time. If you locate a Yellow-billed Cuckoo this summer, please be aware that this species is also a "review species" and the Oregon Bird Records Committee asks for reports. [OB 13(2)]

Bill Haight, Oregon Department of Fish & Wildlife, 506 S.W. Mill Street, P.O. Box 59, Portland, OR 97207.

**Purple Martin colonies.** The Purple Martin Colony Registry Program of the newly-formed Purple Martin Conservation Association is attempting to locate and register a majority of the martin colonies in North America. You can further assist us by attempting to find martin colonies on your travels. If you have or know of a colony, or are interested in starting one, please let us know.

Purple Martin Conservation Association, P.O. Box 178, Edinboro, PA 16412.

**Western Bluebirds.** Individuals with single nest boxes or active with a bluebird trail are asked to send the following information: (1) total number of nest boxes, (2) number of nest boxes used by bluebirds, (3) total number of bluebird eggs, (4) number of bluebirds fledged, (5) general area where the boxes are located, and (6) approximate elevation above sea level. Results will be published. [OB 13(1)]

Earl Gillis, 14125 N.E. Cullen Road, Newberg, OR 97132.

**Red Crossbills.** For a study on Red Crossbills in North America, I am soliciting (1) information on areas with good conifer cone crops, (2) information on occurrence of the birds, and (3) tape recordings, especially of flight calls. [OB 13(1)]

Jeff Groth, Museum of Vertebrate Zoology, University of California, Berkeley, CA 94720
**COLOR-MARKED BIRDS IN OREGON**

**Brown Pelicans.** Brown Pelicans have been color-marked by researchers at the University of California, Davis. The tags vary from plain aluminum bands to bands plus plastic leg markers of various colors. Each configuration has a meaning, so good accurate descriptions are needed. **You may see a green, yellow, or orange plastic tag hanging off a green leg band.** Note the date and location, the color configuration, numbers (if possible), and include any other comments about the situation or condition of the bird. [OB 13(1)]

Pelican Research Project, Department of Wildlife & Fisheries, University of California, Davis, CA 95616, or Roy Lowe, U.S. Fish and Wildlife Service, Marine Science Center, Newport, OR 97365, 867-3011 ext. 270

**Tundra Swans.** Tundra Swans breeding in northwestern Alaska have been marked with blue plastic neck collars bearing white numbers prefixed with the letter U. Some birds were fitted with backpack harness telemetry transmitters. All have FWS bands. Most birds are expected to pass through Pacific or Intermountain flyways. [OB 13(1)]

U.S. Fish and Wildlife Service, Bird Banding Office, Laurel, MD 20708 and Selawik National Wildlife Refuge, P.O. Box 270, Kotzebue, AK 99752.

**Trumpeter Swans.** The Trumpeter Swan Society is looking for sightings of Trumpeter Swans anywhere in Oregon outside the usual nesting area in Harney Co. Information needed is good location data, date, time of day, and behavior — and your name, address, and phone number. The Canadian Wildlife Service has neck-collared Trumpeter Swans during the summer of 1986 in southern Mackenzie District, Northwest Territories. Look for red collars with white alpha-numeric markings. Please note neck collar information, date of sighting, location of sighting, and the presence of other swans. [OB 13(1)]

David Paullin, P.O. Box 113, Burns, OR 97720

**Lesser Snow Geese.** The small breeding population of Lesser Snow Geese in the Prudhoe Bay area of Alaska has been studied for the past 7 years. Several thousand birds have been tarsus-banded and neck-collared with blue and white alpha-numeric bands. [OB 13(1)]


**Lesser Snow Geese.** Look for Lesser Snow Geese wearing a green collar with a 2-letter, 2-digit code (example: "FA21"). In addition, collared geese will be painted either green or red on tops and bottoms of wings. Note the wing color (green or red) and usual location and habitat information. [OB 13(1)]

U.S. Fish and Wildlife Service Regional Office, Migratory Bird Coordinator, P.O. Box 1306, Albuquerque, NM 87103, (505)766-8052, or Bosque del Apache National Wildlife Refuge, P.O. Box 1246, Socorro, NM 87801, (505)835-1828

**Pacific Black Brant.** During the summer of 1986, Brant on the Yukon-Kuskokwim Delta, Alaska, were color banded yellow with a single black digit (number or letter) repeated 3 times around the band. Each bird is carrying 2 color bands on the same leg producing a 2-digit code. Any sighting will be appreciated. Include a description of the code. [OB 13(1)]

James S. Sedinger, Institute of Arctic Biology, 211 Irving Building, UAF, Fairbanks, AK 99775-1780.

**OREGON BIRDS 13(2): 139, 1987**
Dusky Canada Geese. The U.S. Fish and Wildlife Service is collecting information on Dusky Canada Geese in an attempt to understand wintering requirements of this troubled subspecies. Any Canada Goose in Oregon with a red collar is a Dusky. A Canada Goose with a yellow collar is either a Dusky marked several years ago or is a Cackler. Note the following: characteristics of fields they are found in, numbers of Duskys and numbers of other subspecies of Canadas, collar numbers, etc. There are several avenues of reporting your findings. Any marked bird can be reported directly to the U.S. Fish and Wildlife Service. The Portland Audubon Society will take your information and translate it to special Fish and Wildlife forms. [OB 13(1)]

Maurita Smyth, Portland Audubon Society, 5151 N.W. Cornell Road, Portland, OR 97210, (W)238-0667.

Lesser Golden-Plovers. As part of a study on their wintering biology, Lesser Golden-Plovers have been banded on Oahu, Hawaii. Each bird wears a Fish & Wildlife Service band one leg and one or more color bands on the other. Color band combinations are 2 of the same color, 2 of different colors, 3 of 2 colors, and 3 of 3 colors. Please note which leg is color banded and the exact sequence of colors. [OB 13(2)]

Oscar W. Johnson, Department of Biology, Moorhead State University, Moorhead, MN 56560.

Sanderlings. The Sanderling Project has mist-netted and color-banded Sanderlings along the West Coast. The only colors used were green, orange, red, yellow, and white. No blue. Some juvenile Sanderlings have been transplanted to other parts of the coast in an attempt to determine how a young bird selects a given site along the coast as its winter home. Each transplanted bird carries a color combination of bands, and a green flag on its right leg. Please try to record the complete color combination. [OB 13(1)]

The Sanderling Project, P.O. Box 247, Bodega Bay, CA 94923

Western Bluebirds. In 1983 and 1984 Western Bluebird nestlings on the Corvallis Bluebird Trail were marked with 2 color bands on the leg opposite the usual Fish and Wildlife band. A few hand-raised birds also have a white band above the FWS band. Please note the position of the bands, which leg they are on, sex of the bird, place and date of sighting, and behavior of the bird when seen. [OB 13(1)]

Elsie Eltzroth, 3595 N.W. Roosevelt Drive, Corvallis, OR 97330

Black-capped and Chestnut-backed Chickadees. The Northwest Ecological Institute is conducting a long-term study in the Portland west hills, Cedar Mill, and Catlin Gabel School areas. Black-capped and Chestnut-backed Chickadees have been marked with from 1 to 3 colored plastic bands on their legs. Please contact us if you see marked chickadees at your feeder, or if you regularly see Dark-eyed Juncos or House Finches with an aluminum U.S. Fish and Wildlife Service band. [OB 13(1)]

Philip Gaddis, 13640 N.W. Laidlaw Road, Portland, OR 97229, 645-4751, or Char Corkran, 130 N.W. 114th Street, Portland, OR 97229, 643-1349.

ERRATA

TRUMPETER SWANS

In Oregon Birds 13(1): 44 (1987) David Paullin cataloged recent Trumpeter Swan sightings in Oregon outside Malheur N.W.R. In his article Dave attributed a sighting to me of a Trumpeter Swan on 24 October 1982, and gives as the source The Warbler 49(1). In a draft of that article, I corrected the sighting to its actual dates of 6 November 1982 and 24 November 1982. However, for some reason the correction was not made in the final revision, and the incorrect dates were published. Perhaps the confusion comes from The Warbler printing the wrong date in the first place. Nevertheless, the correct dates for the sighting were 6 and 24 November 1982.

Tom Crabtree, 1667 N.W. Iowa, Bend, OR 97701

BAKER COUNTY CBC's

In Oregon Birds 13(1): 91 (1987), the 2 Baker County Christmas Bird Counts were reversed. Baker Valley CBC (number 35) actually had 46 species, and Baker County CBC (number 36) actually had 27 species.

Ann M. Ward, 1242 Dewey, Baker, OR 97814

OREGON BIRDS 13(2): 141, 1987
BIRDING QUIZ: MATCHUP

Owen Schmidt, 3007 N.E. 32nd Avenue, Portland, OR 97212

Match the Oregon birding spot on the left with the bird usually associated with it. One answer is best. Answers on page 149.

Arizona Beach
Barview Jetty
Bear Valley
Bend area
Cape Meares
Eagle Cap
Ft. Klamath
Hat Point
Kimball State Park
Ladd Marsh area
Lost Lake
Malheur N.W.R.
Mary's Peak
Multnomah Falls
Nye Junction
Roaring Springs Ranch
Roxyanne Butte
Salt Creek Falls
Upper Klamath Marsh
Winchuck River mouth

Allen's Hummingbird
Barrow's Goldeneye
Black Swift
Blue-gray Gnatcatcher
Dipper
Grasshopper Sparrow
Great Gray Owl
Least Bittern
Pinyon Jay
Red-shouldered Hawk
Rock Sandpiper
Spotted Owl
Spruce Grouse
Tree Sparrow
Trumpeter Swan
Tufted Puffin
-Upland Sandpiper
White-tailed Ptarmigan
White-throated Swift
Yellow Rail

OREGON BIRDS 13(2): 142, 1987

COASTAL CANADA GEESE: A PRELIMINARY REPORT

The U.S. Fish & Wildlife Service (FWS) is upgrading knowledge of Canada Geese along the Oregon coast. Primary interest is in migration staging areas and wintering areas of Aleutian Canada Geese (Branta canadensis leucopareia) and Dusky Canada Geese (B. c. occidentalis). Data is also being collected on other subspecies of Canada Geese, including the introduced populations of Great Basin Canada Geese (B. c. moffitti).

I have conducted ground searches and aerial surveys the past 2 seasons all along the Oregon coast. However, coverage is still not adequate. To assist in data collection, I have asked for help from other agencies and groups. Notices have appeared in Oregon Birds and other publications to solicit observations from interested individuals in the field. These efforts have begun to pay off in interesting and important sightings.

I have received several reports of a flock of Canada Geese in the pastures adjacent to Nestucca Bay, Tillamook Co. These birds can sometimes be seen in the pastures adjacent to U.S. Highway 101 near the intersection of Brooten Road, which is the southern entrance to Pacific City. This is 1 of only 2 flocks of Duskys that winter along the Oregon coast. Surprisingly, the other flock is found on Goat Island near Brookings, Curry Co., and has a maximum population of 60 birds.

The FWS became aware of the Dusky at Nestucca Bay in the late 1970s when a flock of Aleutian Canada Geese was found wintering near the community of Woods, Tillamook Co., which is just north of Pacific City.

Dusky Canada Geese near Brooten Road and Hwy. 101, Pacific City, Tillamook Co. Photo/Roy Lowe.

OREGON BIRDS 13(2): 143, 1987
From 1979-1985 the Aleutian flock was closely monitored with only limited monitoring of the Dusky flock. However, during the past 2 years I have been closely monitoring both the Aleutians and the Dusksy in this area.

When observations began in late fall 1979, the Dusky flock numbered about 50-60 birds. They were actively hunted by locals, as were the Aleutians. In order to protect the endangered Aleutians, a Canada Goose hunting closure was established in fall 1982 by the Oregon Department of Fish and Wildlife for all of southern Tillamook County. While there has been little increase in the Aleutian population, the Dusksy responded to this protection and the average wintering population of Dusks at Nestucca Bay now numbers 400-500 birds.

Interestingly, both subspecies roost on Haystack (Chief Kiwanda) Rock offshore from Pacific City. This rock is one of more than 1400 rocks, reefs, and islands along the Oregon coast within the boundaries of Oregon Islands National Wildlife Refuge. The Aleutians roost on the rock at night and spend the day feeding in the pastures of only 1 dairy farm in Woods. The farmer is very protective of these birds, and thus they have an adequate sanctuary. On the other hand, the Dusksy roost on the rock during the day and feed at night in a number of pastures surrounding the Little Nestucca arm of Nestucca Bay. The Dusksys are not as fortunate as the Aleutians, since they are chased from the various dairy farms where they may be damaging the pastures. In an attempt to avoid this harassment the geese switched to a nocturnal feeding pattern on the mainland.

Up until December 1986, the Dusksy were seldom harassed on the dairy farm at the intersection of Highway 101 and Brooten Road. The geese often remained in these pastures during the day where they were highly visible to the general public. Unfortunately, apparently as a result of pasture damage, the land owner enlisted the aid of the Animal Damage Control Division of the U.S. Department of Agriculture. This effectively ended daytime use of the area by Dusks until that assistance was terminated in late February 1987.

Separating the subspecies of Canadas in this flock can be quite challenging and impossible at times. The Dusky flock at Nestucca Bay usually contains some Taverner's Canada Goose (B. c. taverneri), Lesser Canada Goose (B. c. parvipes), and Great Basin Canada Goose. Occasionally, Aleutian and Cackling Canada Goose (B. c. minima) may also be present and to further confuse the picture some of the Dusks are light-breasted forms.

For the last several years researchers have been capturing Dusky Canada Geese on their breeding grounds in Alaska and placing red plastic neck collars with numeric or alphanumeric codes on the geese. Some of these marked birds have shown up in the flock at Nestucca Bay. In 1984-85, 2 red-collared birds were seen and last year 2 different collared birds were seen. In both years the marked birds disappeared from the area in midwinter with one of the marked birds in 1985-86 later showing up at Baskett Slough National Wildlife Refuge, Polk County. This year 1 red-collared bird (number 697) arrived in the flock at Nestucca Bay on 6 November 1986.
spent the entire season there, and was last seen on 31 March 1987 when birds began migrating north again.

I have very recently discovered Dusky's using Prince Island, at the mouth of the Smith River just inside California. It is likely that these birds move between Prince and Goat Islands. They probably use pastures somewhere along the Smith River, but there are as yet no such observations. On 18 April 1987 there were 103 Dusky's on Goat Island.

We will be continuing our efforts in the years to come. We urge interested observers to send in their sightings. Your information will help in better understanding and management of our migratory bird resources along the Oregon coast.

Roy Lowe, U.S. Fish and Wildlife Service, Hatfield Marine Science Center, Newport OR 97365


In the afternoon of December 15, 1913, the opera singer Miss Lillian Herlein, resplendent in a stunning headdress comprised of 46 egret plumes, stepped from the stage of Portland's Orpheum Theater, having just given a matinee performance. Waiting for her back stage was a deputy game warden, Mrs. J.C. Murray, who confiscated Miss Herlein's plumes. Tipped by an angry woman who had had her own plume taken, State Game Warden William L. Finley had dispatched Mrs. Murray to enforce the law against the wearing of the prohibited aigrettes. Miss Herlein was frantic in her protests, but Finley was adamant that everyone, even performers in the theater, must obey the law. "I thought this was a good time to stop the practise on the part of the women of the stage," the Morning Oregonian quoted him as saying. "This big plume was such a flagrant violation of the law that I thought maybe the performers would realize what we meant when we confiscated feathers of such value as the set we took from Miss Herlein."

This was not mere grandstanding on Finley's part. He was, more than anyone, responsible for the rescue of Oregon's egret populations. In this first decade of this century, the Great Egret was perilously close to extinction in this country. Plume hunters, feeding an insatiable millinery trade, stalked adult birds to their heronries in swamps and marshes and stripped them of their feathers, leaving the birds bleeding in the mud and the nestlings crying feebly for their parents until they died of starvation or thirst. The great marshes of southeastern Oregon supported hundreds of nesting egrets, but here as elsewhere, poachers penetrated the vast expanses of cattails and willows and slaughtered the birds for their feathers. When Finley and his partner, Herman T. Bohlman, both avid wildlife photographers, sought to photograph the Great Egret at its nest, they travelled to the Klamath Basin in 1905 and the Malheur-Harney Basin in 1908, following the path of the plume hunters, and found death and destruction amidst the marsh's teeming abundance. As terns and gulls flew around them, while Red-winged and Yellow-headed Blackbirds, Virginia Rails and Marsh Wrens, sang from the tules, the 2 men mulled the remains of the massacre. Snowy white wings lay upon the the ground, piled in heaps where the butchers had worked. Flies buzzed around rotting carcasses. Elsewhere, silent nests held skeletons of young egrets, bleached white bones in a green cemetery. The marsh had become a sacrificial altar to the whims of women's fashions. Finley and Bohlman recorded what they saw, photographed the living denizens of the marsh, and presented their findings to President Theodore Roosevelt, who in August 1908 proclaimed Lower Klamath Lake and Malheur Lake as wildlife reservations. With protection, the egrets would return.

Unfortunately, Finley's accomplishments are largely unknown to present-day naturalists. Many birdwatchers recognize him only as the eponym of a popular birdwatching spot, William L. Finley National Wildlife Refuge south of Corvallis, and know nothing of his role in the establishment of Oregon's refuges, or of his pioneering photographic studies of nesting birds, or of his motion picture work. Worth Mathewson's beautiful book, William L. Finley: Pioneer Wildlife Photographer, should correct this myopia. Its over 200 Finley photographs and short text fill a need of reintroducing Finley to the moderns.

The text outlines Finley's career and touches upon related topics: the development of wildlife photography, the contributions of women naturalists, and the growth of the wildlife conservation movement. Mathewson discusses Finley's friendship with Herman Bohlman and their early studies of birds, first collecting eggs and skins as members of the short-lived North-Western Ornithological Association, then their work together photographing nesting birds. He describes in good detail Finley's importance in the conservation movement and his early career as Oregon's State Game Warden. He discusses Finley's marriage to Nellie Irene Barnhart in 1906 and, after 1908, their collaboration in still photography, in writing magazine articles and books, and in making early motion pictures of American wildlife. Mathewson introduces sets of photographs with short descriptions of the circumstances behind them. He assesses Finley's achievements in photography.

The heart of the book is the photographs, over 200 clearly reproduced black and white illustrations of a time before modern cameras and conveniences, of an era before we had grown to have an insouciant disregard for the hardships and difficulties of field work. Then a trip from Dayton to the coastal bird islands of Three Arch Rocks took 3 days in a horse-drawn wagon and a journey from the Willamette Valley to Malheur was a tortuous trek through endless sagebrush flats. Cameras were large, heavy things, with fragile glass plates that weighed 4 pounds a dozen. The men had to pack these high up into a swaying tree or ferry them across a tule marsh. They scaled offshore cliffs with their burdensome loads to reach a colony of Common Murres crowded on precarious ledges, while below the surf beat against the rocks, spewing salt spray high into the sky.

OREGON BIRDS 13(2): 146, 1987
But the bird portraits that resulted were beautiful. Mathewson’s selection includes seabirds of the Oregon coast—Tufted Puffin, Leach’s Storm-Petrel, Common Murre, Brandt’s Cormorant—and waterbirds of the Oregon desert marshes—American Avocet, White Pelican, a downy young Pintail, a gorgeous hen Canvasback, demure and soft before the lens. A series of California Condor photographs, considered the best ever made, taken in southern California in 1906, illustrate the past life of that tragic bird. Many of the bird photographs in this book have been published before, but they were scattered throughout a wide array of books and magazines and ornithological journals. Mathewson has done us a great service by bringing them together from their disparate sources.

There are human portraits as well. Through Finley’s photographs we get glimpses of naturalists of his era, such as Alfred Webster Anthony, a prominent west coast ornithologist who lived for many years in Portland, Ellis F. Hadley, a young collector from Dayton, Ron (Ross?) Nicholas, a Portland bird student. Several photographs show Dallas Lore Sharp, the Boston nature writer who visited Finley and Bohlman in the summer of 1912 and dedicated his book, Where Rolls the Oregon, to them. There are family portraits of Finley’s wife Irene, his son William Jr., and his daughter Phoebe [Catherine. Amusing and interesting photographs show Finley and Bohlman in the course of their field work, many self-portraits taken with a trip cord. At night the men would sleep in the marshes on muskrat lodges or burrow into a haystack to escape mosquitoes, and in the morning they would mug for the camera, feigning sleepiness. Finley snapped Bohlman flipping a flapjack high into the air, and in another photograph, waits hungrily, his plate ready, while Bohlman cooks breakfast.

There are only a few small, insignificant errors: the magazine Bird-Lore is consistently written without the hyphen and Common Egret, an older name, is used in place of the current Great Egret. I found only a single typographical error. More could have been said about the years Finley spent in collaboration with Herman Bohlman, especially since Mathewson writes that they were arguably the highlight of Finley’s career. There is little here on the series of articles Finley published in the western ornithological journal Condor in the period 1902-1907, and very few of the Bohlman and Finley photographs which illustrated those articles are reproduced. Perhaps they were some of the ones dispersed by Mrs. Finley after his incapacitation by stroke in 1947 and death in 1953, and later lost. I would also have liked a bibliography, preferably annotated, of Finley’s magazine and journal articles. He often adapted articles for republication, giving the reader a feeling of deja vu. An annotated list could have detailed these relationships and indicated where photographs had appeared previously.

But this is mere quibbling, and should not detract from the fact that this is an admirable, attractive, well-constructed book. It is also an important book, bringing into focus the accomplishments and career of a nationally significant naturalist, conservationist, and wildlife photographer. Roger Tory Peterson’s concluding words in his foreword to this book are apt: “We owe a vote of thanks to Worth Mathewson for his research and scholarship in putting the life and accomplishments of William Lovell Finley on record so that today’s burgeoning army of birdwatchers, conservationists, and environmentalists will have some perspective. To plan for the future we must know about the past — and those who were on the firing line before us.”

George A. Jobanek, 2730 Alder, Eugene, OR 97405

BIRDING QUIZ: MATCHUP Answers, from page 142.

| Arizona Beach                      | Allen’s Hummingbird   |
| Barview Jetty                      | Rock Sandpiper        |
| Bear Valley                       | Upland Sandpiper      |
| Bend area                          | Pinon Jay             |
| Cape Meares                       | Tufted Puffin         |
| Eagle Cap                         | White-tailed Ptarmigan|
| Ft. Klamath                       | Great Gray Owl        |
| Hat Point                         | Spruce Grouse         |
| Kimball State Park                | Yellow Rail           |
| Ladd Marsh area                   | Tree Sparrow          |
| Lost Lake                         | Barrow’s Goldeneye    |
| Malheur N.W.R.                    | Trumpeter Swan        |
| Mary’s Peak                       | Spotted Owl           |
| Multnomah Falls                   | Dipper                |
| Nye Junction                      | Grasshopper Sparrow   |
| Roaring Springs Ranch             | White-throated Swift  |
| Roxyanne Butte                    | Blue-gray Gnatcatcher |
| Salt Creek Falls                  | Black Swift           |
| Upper Klamath Marsh               | Least Bittern         |
| Winchuck River mouth              | Red-shouldered Hawk   |
IN MEMORIAM
BRUCE L. "VAN" VAN HOUSEN

OFO member and avid Oregon birder Bruce L. "Van" Van Housen died of pancreatic cancer 21 November 1986, in his hometown of New Milford, PA, where he had returned shortly before his death. He was 50 on 16 September 1986.

A Pennsylvania native and high school teacher, Van came to Oregon State University, Corvallis, in 1978 for a year's study. He came to Oregon to stay in 1980 by way of the Southwest, adding 130 birds to his life list en route. He was an accountant with the State of Oregon, General Services Division, in Salem until his death.

Van was the first birder Jerry and I met. We ran into him at Baskett Slough N.W.R. on 1 March 1981. I remember standing in the parking lot in the spring sunshine while he described the Spotted Redshank he and former OFO President Dick Palmer (along with many others) had seen 2 weeks earlier at the south jetty of the Columbia River.

At that time Van had birded about 5 years. His birding style was intense—he was always ready to chase a bird—but he was also patient. He could watch by the hour while young Black-backed Woodpeckers learned to fly. Except for his life list, Van was proud of not "listing" and he took keen delight in ribbing his friends who did. He was equally quick with a wisecrack, an exclamation about Oregon's beauty, or a helping hand.

He left us a wealth of memories. Our scopes stood side-by-side when we thrilled to the sight of our first California Condor, and we first heard the fabled song of the Eurasian Skylark together on San Juan Island. And I will never forget New Year's Day, 1984, striding with Van through Mike Robbins' sector of the Tule Lake CBC—high desert transformed that day by hoarfrost. Birds were scarce but the search was exhilarating.

Van's last trip with fellow birders was the Salem Audubon Society trip to the Breitenbush area above Detroit, June 28, 1986. He enlivened the outing despite his illness and refound a hoped-for Black-backed Woodpecker for the group.

Van was not a state lister per se, but from comments he made I think his Oregon list was near 330. Laurie and Ken Knittle and I shared his last addition to that list—a Yellow Rail near Ft. Klamath, 1 June 1985.

Deeply attached to his adopted state, he often signed himself "Van of Oregon." It was an unforgettable pleasure to bird with him and to be his friend.

Barb Bellin, 4730 Elizabeth North, Salem, OR 97303

INVENTORY OF NESTING RAPTORS IN UNION AND BAKER COUNTIES, OREGON

Mark Henjum, Regional Nongame Biologist, Oregon Department of Fish & Wildlife, La Grande, OR 97850

Two recent studies conducted in northeastern Oregon have produced some interesting and valuable data concerning nesting raptors in this far corner of the state. Beginning in the spring of 1984, the Oregon Department of Fish & Wildlife (ODFW), through the Nongame Program, undertook an effort to gather baseline nesting data on the following species: Red-tailed Hawk, Swainson's Hawk, Ferruginous Hawk, Golden Eagle, and Prairie Falcon. Much of the available data on these species was incomplete. No systematic surveys had been conducted in the past, and what information existed was in the notebooks and diaries of biologists, birders, and others.

The original idea for this effort came from the late Ron Rohweder, ODFW nongame biologist in the Department's northeast region. He envisioned increasing conflicts between man's activities in the region and these important raptor species. He could foresee that with better data, some of these conflicts might be resolved through the land-use planning process.

Union County Inventory

During the spring and early summer of 1984, Stuart Croghan, a consulting biologist, contracted with the ODFW to inventory nesting raptors in the county. Armed with a pickup, binoculars, spotting scope and maps, Stuart set out to locate raptor nests and record pertinent production data. Unfortunately, Union County received record breaking cold and wet weather during the spring months. The weather not only hampered the nest survey but it also had a severe impact on nesting success.

Many bottomland habitats were inundated with standing water well into the nesting season and consequently prey availability was reduced. Inclement weather also hampered incubation and reduced survival of nestlings. Croghan noted a pair of Golden Eagles that lost 2 nestlings, laid a second clutch of 2 eggs, and this effort also failed. He also noted a Swainson's Hawk pair copulating and defending their nest site on 22 June, a full
month later than would be expected.

As the survey progressed, it became apparent that accurate production data could not be obtained due to the weather situation. With so many nests failing, being abandoned, or with re-nesting taking place, several visits at each site would have been necessary to obtain good production data. We decided to concentrate on locating as many sites as possible and recording them on data cards with an accompanying photo. Such an effort would facilitate any surveys planned in the future. In addition, we asked Croghan to spend 2 days per week gathering data on a Bald Eagle nest site discovered near Unity Reservoir in Baker County. This site is the only known active Bald Eagle nest site in northeast Oregon.

The following is a summary of nests located during the survey:

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Swainson's Hawk</td>
<td>24</td>
</tr>
<tr>
<td>Red-tailed Hawk</td>
<td>36</td>
</tr>
<tr>
<td>Ferruginous Hawk</td>
<td>3</td>
</tr>
<tr>
<td>Golden Eagle</td>
<td>8</td>
</tr>
<tr>
<td>Prairie Falcon</td>
<td>10</td>
</tr>
<tr>
<td>Other*</td>
<td>44</td>
</tr>
</tbody>
</table>

*Other included 33 nests which were either inactive, abandoned, or temporarily active but species not confirmed, 1 Osprey, 1 Bald Eagle (Baker County), 1 Northern Goshawk, 5 Great Horned Owls, 1 Long-eared Owl, 1 Canada Goose (in a raptor nest), and 1 undocumented Great Blue Heron rookery.

The final report written by Croghan included the following miscellaneous notes:

1. The vast majority of raptor nest sites occurred at or near riparian zones, including irrigation ditches, ephemeral streams, pond, etc.

2. Nests occurring in forested uplands were found either:
   a. in a Western larch,
   b. in or near a riparian zone, or
   c. in the bottom of a shallow canyon near open ridges or flats.

3. Deciduous trees in the southern one-half of Union County contained many raptor nests. Only one raptor nest was found in a deciduous tree in the northern one-half of Union County. No explanation for this observation was determined.

Baker County Inventory

The spring of 1986 saw the initiation of the second planned raptor survey in northeastern Oregon. The ODFW contracted with Kent Woodruff, a wildlife biologist from Baker, Oregon, to conduct an inventory of nesting raptors in Baker County. Woodruff had extensive experience with raptors and had collected raptor data for the Bureau of Land Management (BLM) office in Baker while employed there.

The objectives were similar to the Union County survey, however, extra emphasis was placed on obtaining existing data from resource agency files (BLM, US Forest Service, Soil Conservation Service, and ODFW), and personal contacts with landowners and knowledgeable individuals. In addition, Woodruff submitted an article to the local newspaper soliciting raptor nest information from the public. A total of 19 nesting raptor species were recorded during the 3-month study. The following list summarizes the nests located during the survey:

<table>
<thead>
<tr>
<th>Species</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osprey</td>
<td>4</td>
</tr>
<tr>
<td>Bald Eagle</td>
<td>1</td>
</tr>
<tr>
<td>Northern Harrier</td>
<td>1</td>
</tr>
<tr>
<td>Sharp-shinned Hawk</td>
<td>3</td>
</tr>
<tr>
<td>Cooper's Hawk</td>
<td>2</td>
</tr>
<tr>
<td>Northern Goshawk</td>
<td>22</td>
</tr>
<tr>
<td>Swainson's Hawk</td>
<td>46</td>
</tr>
<tr>
<td>Red-tailed Hawk</td>
<td>95</td>
</tr>
<tr>
<td>Ferruginous Hawk</td>
<td>33</td>
</tr>
<tr>
<td>Golden Eagle</td>
<td>65</td>
</tr>
<tr>
<td>American Kestrel</td>
<td>1</td>
</tr>
<tr>
<td>Prairie Falcon</td>
<td>42</td>
</tr>
<tr>
<td>Common Barn Owl</td>
<td>6</td>
</tr>
<tr>
<td>Western Screech-Owl</td>
<td>1</td>
</tr>
<tr>
<td>Great Horned Owl</td>
<td>27</td>
</tr>
<tr>
<td>Burrowing Owl</td>
<td>2</td>
</tr>
<tr>
<td>Barred Owl</td>
<td>1</td>
</tr>
<tr>
<td>Long-eared Owl</td>
<td>1</td>
</tr>
<tr>
<td>Great Gray Owl</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1 displays the number of known nest sites of the primary species inventoried. Also included is an estimate (by the contractor) of the total number of nesting pairs in the county.
Table 1
Known Nest Sites and Estimate of Total Population for Baker County.

<table>
<thead>
<tr>
<th>Species</th>
<th>Known Nests</th>
<th>Percentage</th>
<th>Estimate of Total Pop.*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Golden Eagle</td>
<td>65</td>
<td>85</td>
<td>76 pairs</td>
</tr>
<tr>
<td>Red-tailed Hawk</td>
<td>95</td>
<td>35</td>
<td>271 pairs</td>
</tr>
<tr>
<td>Ferruginous Hawk</td>
<td>33</td>
<td>60</td>
<td>55 pairs</td>
</tr>
<tr>
<td>Prairie Falcon</td>
<td>42</td>
<td>90</td>
<td>47 pairs</td>
</tr>
<tr>
<td>Swainson's Hawk</td>
<td>46</td>
<td>50</td>
<td>92 pairs</td>
</tr>
<tr>
<td>Total</td>
<td>281</td>
<td>Average 64</td>
<td>541 pairs</td>
</tr>
</tbody>
</table>

* Based on a determination of available habitat and potential nesting sites for each species from aerial photographs, various maps, and personal knowledge.

Results of the survey show that Baker County has some of the highest raptor populations in the region. According to the data collected, there are 3 areas in the county that appear to be very important for birds of prey. These are:

Powder River - Thief Valley Reservoir
This area supports very dense populations of Golden Eagles and Prairie Falcons. The BLM is considering “Area of Critical Environmental Concern” designation through their planning process. Nesting habitat

Baker - Pleasant Valley
This area is almost entirely private land and supports high populations of nesting buteos (Swainson’s, Ferruginous, and Red-tailed Hawks). Squirrels are abundant in this area, especially near agricultural areas.

Love Reservoir - Lookout Mountain
This area has probably the densest nesting populations of raptors in the county. This is the primary nesting area for Ferruginous Hawks in the county. A number of artificial nest platforms have been constructed for Ferruginous Hawks in this area and are commonly used by the birds. The area has a diversity of nesting habitat and substantial prey populations nearby.

Some interesting data were uncovered as a result of this project. For example, records from the BLM concerning a Great Horned Owl nest site revealed that during the period 1981-1983 the nest fledged 4 young in each of those years. A single four-young brood is rare and 3 years running is undocumented in the literature.

Another Great Horned Owl nest was reported as being active since the 1950’s. The nest is located on a cliff along a well traveled road, which may account for the long history of documented use.

Woodruff also reported on the lack of Burrowing Owl territories encountered during the survey. He traveled some 3225 miles in the field and located only 2 territories, one by direct observation and the other from a (cliffs) along the river is abundant and adjacent lands have high prey populations.

OREGON BIRDS 13(2): 154, 1987

Ferruginous Hawk nestling. Photo/Committee for Idaho’s High Desert.

Cliffs are nesting habitat for Prairie Falcons and Golden Eagles. Prairie Falcon nestlings. Photo/Committee for Idaho’s High Desert.

OREGON BIRDS 13(2): 155, 1987
USFS report. The reasons for the decline in this species is unknown. The ODFW will be attempting to gather more data on a regionwide basis during the next two years.

The 2 surveys conducted by Stuart Croghan and Kent Woodruff through the Nongame program have greatly expanded our knowledge of raptors in the Northeast Region. Similar surveys in the remainder of the region will give the ODFW the type of data needed to more effectively protect these sensitive wildlife species.

Northern Harrier nestlings. Photo/Oregon Department of Fish & Wildlife.

WINTER HABITAT PREFERENCES OF NORTHERN HARRIERS ON MALHEUR NATIONAL WILDLIFE REFUGE, OREGON

Carroll D. Littlefield, Malheur Field Station, Box 260 E, Princeton, OR 97721

Steven P. Thompson, Stillwater National Wildlife Refuge, Box 1236, Fallon, NV 89406

Of the 10 species within the genus *Circus*, 7 are confined to the Old World, 2 occur only in South America, and 1 is found in both North America and the Old World (Watson 1977). In North America, the Northern Harrier (*C. cyaneus hudsonius*) is widely distributed, nesting from northern Alaska and Canada, south to northern Mexico (Baja California), southern New Mexico, southern Texas to southeast Virginia, and wintering primarily from southern Canada south through the United States and Middle America (AOU Check-list 1983). In Oregon, Gabrielson and Jewett (1940) reported the species as a permanent resident, but much more common east than west of the Cascade Range. On Malheur National Wildlife Refuge (NWR), Harney Co., in southeast Oregon, the Northern Harrier is the second most commonly encountered wintering hawk, concentrating on dry meadow lands and emergent stands where it finds its major prey — montane voles (*Microtus montanus*).

Although Northern Harriers nest commonly on the refuge, the main objective for the study was to examine preferred feeding habitat for those wintering. The number of individuals that wintered on the refuge varied annually depending on winter severity (particularly snow depth) and small mammal populations; however, a total of 960 harrier observations was recorded during the study. Surveys were conducted in 1977-78, 1978-79, 1979-80, 1985-86, and 1986-87. The fewest numbers occurred in 1977-78 (n=99), while greatest numbers were noted in 1979-80 (n=306). During the 5-year study, Northern Harrier observations averaged 192 annually. Certainly all wintering harriers were not seen on any particular survey, as many likely were perched and not visible. Of the 960 individuals, only 79 (8.2%) were recorded as perched when first observed. Craighead and Craighead (1956) estimated that 57 percent of the harriers in Michigan were perched and not visible during their studies, and a similar percentage probably occurred on Malheur NWR, but no effort was made to determine the number.

Migrants were present in late September through November, but population stability was generally attained by December. A spring influx was noted in late February and March, and the majority of Northern Harriers present in April were members of nesting pairs.

Surveys were usually initiated in November at the time cattle were on or moving onto the refuge. The grazing history of Malheur NWR could be summarized as heavy winter use by livestock, primarily cattle. A brief history of the grazing was presented by Taylor and Littlefield (1986) and Littlefield and Thompson (in press). After 1973, the number of AUMs (Animal Unit Months, 1 cow for 1 month) began declining, and by 1982, AUMs had been reduced from a peak in 1973 of 126,592 to 31,550. Along the survey route an interspersion of idle, hayed, and grazed land occurred, allowing us to examine habitat preferences for wintering Northern Harriers.
STUDY AREA

Malheur NWR lies within the Malheur-Harney Lakes Basin and contains about 74,000 ha. With the NWR located in the northern Great Basin, the climate is semi-arid with most precipitation occurring between November and January, and in May and June. Winters are cold with sub-zero temperatures for several weeks. Snow depths rarely exceed 15 cm at any time, but in recent years snow depth of 50 cm has been recorded.

Within the refuge boundary, there are a variety of vegetative types, but prominent associations are shallow marsh/meadow; big sagebrush (Artemisia tridentata)/Great Basin wildrye (Elymus cinereus); and black greasewood (Sarcobatus vermiculatus)/saltgrass (Distichlis stricta). The refuge is 43 km at its widest point and 70 km long. Major geographic features are Malheur, Mud, and Harney Lakes, Double O, and the Blitzen Valley.

The study area was in the Blitzen Valley, which contains about 26,000 ha. Along the transect route, habitat was primarily flood-irrigated meadows interspersed with sagebrush or greasewood uplands. Adjacent to the route, fields were of various sizes and under different land management regimes — idle, hayed, and grazed. Idle lands had not been mowed or grazed for at least 1 year; hayed fields were mowed in August, with harvested hay removed for livestock feeding off the refuge; and grazed lands were mowed, with hay rake-bunched, and grazed in place. Cattle were usually moved onto fields in September and allowed to graze both the uplands and rake-bunched hay through portions of the winter. The percentage under the different land management regimes for the 5-year study is presented in Table 1. In addition to the three major regimes, a few hectares were burned in spring, but these areas were usually minimal.

<table>
<thead>
<tr>
<th>Years</th>
<th>Percent Idle (%)</th>
<th>Percent Hayed (%)</th>
<th>Percent Grazed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1977-78</td>
<td>18</td>
<td>32</td>
<td>50</td>
</tr>
<tr>
<td>1978-79</td>
<td>35</td>
<td>26</td>
<td>39</td>
</tr>
<tr>
<td>1979-80</td>
<td>46</td>
<td>8</td>
<td>46</td>
</tr>
<tr>
<td>1985-86</td>
<td>45</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>1986-87</td>
<td>45</td>
<td>12</td>
<td>43</td>
</tr>
<tr>
<td>Average</td>
<td>38</td>
<td>17</td>
<td>45</td>
</tr>
</tbody>
</table>

METHODS

Efforts were made to conduct bimonthly surveys, but this was not always possible. The transect route was driven at about 24 kph and all Northern Harriers seen were recorded. Starting at Malheur NWR Headquarters, the transect extended 64 km south to near Frenchglen at the refuge's southern extremity. A total of 50 surveys was completed during the 5-year study: September (1); October (4); November (8); December (8); January (7); February (6); March (9); April (7).

Incidental to harrier surveys, small mammal trapping was conducted on grids at scattered localities in the Blitzen Valley in areas under the 3 different land-use regimes (Feldhamer 1979, Comely et al. 1983). Data from these trappings were used to determine preferred habitat and densities of small mammals, particularly montane voles.

RESULTS

The importance of microtine mice in the diets of Northern Harriers has been well documented (e.g. Bent 1937, Craighead and Craighead 1956, Clark 1972, Newton 1979, Thompson and Comely 1982, Hamerstrom 1986).

On Malheur NWR, Northern Harrier castings have not been analyzed; however, from data based on: (1) prey remains at harrier nesting sites; (2) general observations of prey items being carried or consumed by harriers; and (3) small mammal trapping in preferred Northern Harrier hunting habitat, it was determined that the montane vole was the most important prey for harriers on the refuge.

Montane vole populations in relation to land use

Craighead and Craighead (1956), while studying raptor and small mammal relationships in Michigan, reported: (1) high vole densities were associated with dense grass or weedy cover, (2) overgrazed pastures and crop land supported relatively low small mammal populations, and (3) a relationship existed between vole density and raptor density. Feldhamer (1979) reported vegetative cover was important for montane voles on Malheur NWR. He compared vole densities between idle and hayed lands (lands being grazed could not be trapped, because cattle trampled traps), and reported there were no statistical differences in estimated vole densities between the 2 in August. However, by November, vole densities in the idle land remained unchanged, while in the hayed land only 1 vole was captured. In another related refuge study, Comely et al. (1983) estimated small mammal numbers per hectare during three periods. In November...
1978, there were 69.4 voles/ha on an idle plot, compared to 36.1/ha in hayed, and 0/ha in grazed. Vole numbers declined to 2.8 voles/ha by March 1979 on the idle plot, but none were trapped in the hayed and grazed plots. In January 1980 there were 40 voles/ha on the idle plots, compared to no voles trapped on hayed and grazed plots. Both of these studies demonstrated that idle fields had greater vole densities compared to hayed and grazed fields. Interestingly, Comely et al. (1983) reported that voles increased from 0/ha just after a plot was burned in March 1979 to 125/ha in January 1980.

Meadow vole populations decreased from autumn through spring (Feldhamer 1979, Comely et al. 1983), but because of grazing, flooding, destruction of cover, and other factors, voles continued to provide a prey base for Northern Harriers as their vulnerability to predation increased (Craighead and Craighead 1956).

Northern Harrier use in relation to different land management

Of the 960 Northern Harrier observations recorded on surveys, 627 (65.3%) were associated with idle fields, while 129 (13.4%) were in hayed fields, 197 (20.5%) were in grazed fields, and 7 (0.7%) were in burned fields. When idle and hayed areas were combined, 78.7% of the harriers were using fields which were not being or had not been grazed by cattle. The average percentage of ungrazed land within the study area totalled 55%. Sample size was minimal for burned areas and was therefore excluded from data analysis.

In this study, Northern Harriers hunted the 3 land-use regimes disproportionately to their availability ($\chi^2 = 326.17$, 2 d.f., $P = 0.01$). Significantly greater hunting pressure was exerted on idle land when compared to grazed ($\chi^2 = 300.49$, 1 d.f., $P = 0.01$), and hayed ($\chi^2 = 68.24$, 1 d.f., $P = 0.01$). Hayed areas frequently contained residual vegetation which had not been mowed, and this provided patches of small mammal habitat. This likely accounted for hayed lands receiving significantly greater Northern Harrier use than areas grazed by cattle ($\chi^2 = 26.16$, 1 d.f., $P = 0.01$).

Craighead and Craighead (1956) noted similar Northern Harrier habitat use in Michigan. High small mammal density areas were characterized by heavy grass and weed cover, and in autumn and winter all harrier use was in these vegetative types. Winter Michigan harrier concentrations indicated high small mammal densities, and from casting analysis more than 90% of their diet consisted of voles.

**Table 2. Northern Harrier habitat use in relation to season on Malheur NWR, Oregon. Sample size followed by percentage in parenthesis.**

<table>
<thead>
<tr>
<th>Period</th>
<th>Idle</th>
<th>Hayed</th>
<th>Grazed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sept.-Oct.</td>
<td>91(66.9)</td>
<td>36(26.5)</td>
<td>9(6.6)</td>
<td>136</td>
</tr>
<tr>
<td>Nov.-Dec.</td>
<td>219(67.4)</td>
<td>61(18.8)</td>
<td>45(13.8)</td>
<td>325</td>
</tr>
<tr>
<td>Jan.-Feb.</td>
<td>97(70.3)</td>
<td>8(5.8)</td>
<td>33(23.9)</td>
<td>138</td>
</tr>
<tr>
<td>Mar.-Apr.</td>
<td>220(62.1)</td>
<td>24(6.8)</td>
<td>110(31.1)</td>
<td>354</td>
</tr>
</tbody>
</table>

Hayed lands had 26.5% of the Northern Harrier use in September and October and 18.8% in November and December. However, there was a major decline in use after December. This decline was likely attributable to depletion of small mammals in residual vegetative patches. In addition, fewer hectares of hayed lands were available after December.

Grazed lands had low harrier use (6.6%) in September and October, but increased to 31.1% by March and April. Fewer hectares were grazed earlier in the season; however, it is doubtful this was the major factor for reduced harrier use. The greater prey base present on hayed and idle lands likely resulted in harriers concentrating their hunting activities, but as small mammal populations became depleted in these habitats, harriers were forced into the less favorable grazed areas after January.
Northern Harrier habitat use areas

Generally, Northern Harriers hunted in three habitats: meadow, marsh, and shrub upland. Some use was recorded in other habitat types (i.e. riparian and fallow), but so few were noted that they will not be discussed here. Of 270 harriers for which habitat was recorded, 132 (48.9%) were seen in meadows, 98 (36.3%) in marshes, and 40 (14.8%) in uplands. In idle lands, meadow habitat was used extensively from September through December (46.8%), but declined thereafter. Only 18.2% of the harriers were using idle meadows in January and February, and 29.6% in March and April. The mid-winter decline was probably attributable to snow-cover, as snow over residual vegetation allowed small mammals to remain well concealed. There was increased use in marsh habitat in both idle and grazed lands as the nesting season approached, since the majority of harrier pairs on the refuge use marsh vegetation, primarily hardstem bulrush (Scirpus acutus), for nesting purposes.

In grazed habitat, harriers hunted meadows most often from September through December, but use declined and remained low through April. Reasons for this decline were unknown, but likely resulted from depleted small mammal populations. Upland use remained limited, but stable throughout the winter period. In hayed lands, harrier use in meadows was evident from September through December, but there was no use after December. Most use of all 3 habitat types on hayed lands occurred early in the season, with little use after mid-November.

DISCUSSION

Beginning in 1974 and continuing through 1982, several studies were initiated on Malheur NWR which examined the relationships between winter livestock grazing and wildlife populations. In this study, it was determined that Northern Harriers preferred habitat that had not been or was not being grazed by cattle. This preference was related to significantly greater numbers of montane voles on idle fields. From data collected during this study, it was evident that habitat of harriers and other raptor species can be dramatically improved by eliminating winter livestock grazing from wetland or grassland ecosystems. Unfortunately, much of the wintering habitat is privately-owned, and little habitat improvement can be expected on private lands. However, in the 11 Western states, many hectares are managed by state and federal agencies for wildlife. Ungrazed wintering habitat is certainly in short supply for raptors, and it was shown here to be preferred by Northern Harriers. This paper documents several ways in which land management agencies could provide invaluable habitat and increase numbers of wintering Northern Harriers by removing cattle.

ACKNOWLEDGEMENTS

We would like to thank several U.S. Fish and Wildlife Service personnel who participated in this study. These included John Cornely, Brad Ehlers, Gary Ivey, Richard Johnstone, and David Paullin. In addition, we would particularly like to express our thanks to Joseph P. Mazzoni who stimulated interest in developing habitat studies on Malheur NWR. Roland and Gaylin Holloway, Malheur Field Station, spent considerable time helping with surveys. Steve Speich gave valuable statistical assistance.

LITERATURE CITED


**STATUS AND DECLINE OF SWAINSON'S HAWKS IN OREGON: THE ROLE OF HABITAT AND INTERSPECIFIC COMPETITION**

Stewart W. Janes, Biology Department, University of California, Los Angeles, California 90024 (Present address: 1140 Applegate Rd., Jacksonville, Oregon 97530)

Abstract. Swainson's Hawk (Buteo swainsoni) populations west of the Rocky Mountains have declined in abundance since the turn of the century, some by as much as 90%. The decline in Oregon does not appear to have been as precipitous as in some areas (e.g. California), but the Swainson's Hawk is no longer an abundant or even common bird in the state. While recent data suggest that Oregon is not in immediate danger of losing its Swainson's Hawks, there is little indication that the persistent decline has slowed or halted.

Explanations for the decline remain elusive, but one important factor appears to involve habitat change. Since settlement by Europeans, the intermountain region of western United States has undergone a series of gradual changes that continue today. The spread of junipers and the addition of utility poles and introduced trees all favor the Red-tailed Hawk (B. jamaicensis) at the expense of the Swainson's Hawk. The two species are intense competitors and rigorously defend mutually exclusive territories during the breeding season. Despite the apparent dominance of Swainson's Hawks in interspecific territorial encounters, the competitive advantage appears to belong to the Red-tailed Hawk.

**INTRODUCTION**

The Swainson's Hawk breeds throughout much of western North America from Alaska to Mexico, but in recent years several populations have experienced dramatic declines, particularly those in Oregon, California, and Nevada. Populations in California may have declined to less than 10% of their former abundance (Bloom 1979).

Oregon populations of Swainson's Hawks have also declined though apparently not to the same degree as those in California. Gabrielson and
Jewett (1940) considered the Swainson's Hawk to be one of the most abundant breeding hawks in the arid and semi-arid regions of Oregon. Further, they wrote that, while the Swainson's Hawk could still be considered common, its numbers had noticeably decreased in recent years. Only 29 years later Marshall (1969) wrote that the Swainson's Hawk was now rare and still declining in the state. The decline appears to have been both gradual and continuous beginning at least as early as the 1920s (Jewett 1936), and there is little evidence to suggest that the trend has changed.

Not all Swainson's Hawk populations have declined. For example, populations from the northern Great Plains in Canada appear to be maintaining current numbers or even expanding (Schmutz pers. comm.).

In this paper I review the limited data regarding the status of the Swainson's Hawk in Oregon and offer at least a partial explanation for their decline in the intermountain West. I briefly summarize 11 years of field work on the competitive relations among Swainson's, Red-tailed, and Ferruginous Hawk (B. regalis) with a focus on habitat. In addition, I also present information regarding the mechanism of competition through which the habitat differences among these species are accentuated. Finally, I apply these findings to the status of the Swainson's Hawk in the attempt to understand their recent decline and predict the future for these birds in Oregon and throughout the intermountain region.

**STUDY AREAS AND METHODS**

I studied buteo populations at 6 sites in the intermountain region of the western United States. Populations in southeastern Wasco County, Oregon (hereafter referred to as the Antelope site) were observed between 1973 and 1985. Observations at the remaining 5 sites in northern Morrow County, Oregon (Boardman site), central Morrow County, Oregon (Heppner site), eastern Siskiyou County, California (Tulelake site), southern Cassia County, Idaho (Strevell site), and southeastern Tooele County, Utah (Vernon site) were completed between 1979 and 1983. I studied behavioral interactions, reproductive success, diet, and habitat relations on a total of 101 Swainson's Hawk home ranges, 102 Red-tailed Hawk home ranges, and 50 Ferruginous Hawk home ranges. Descriptions of the study sites and the methods employed are described elsewhere (Janes 1984a, 1985a, b, Janes et al. in prep.).

For those unfamiliar with the multivariate statistics used to evaluate the habitat relations among species, the analysis selects variables and weights them according to their ability to distinguish between species. The result is one or more independent habitat gradients each of which is composed of some combination of the original habitat variables that emphasizes habitat differences among species. If, in fact, these species compete for habitat, the gradients revealed by the discriminant analyses likely reflect those features most important in the interactions among these species.

**RESULTS AND DISCUSSION**

**Oregon Status**

To understand the current status of the Swainson's Hawk in Oregon, it is necessary to first examine its former distribution and abundance. Gabrielson and Jewett (1940) indicated that the Swainson's Hawk occurred broadly in the grassland and shrubsteppe habitats east of the Cascades. Egg collections provide another source of information from early this century and confirm a broad distribution (Table 1). The Western Foundation of Vertebrate Zoology collection contains 43 clutches from Oregon Swainson's Hawks, and in this limited sample, 9 of the 17 counties east of the Cascades are represented.

While egg collections do not represent systematically collected data, they can suggest centers of abundance. Most clutches originated in one of 4 areas: northern Harney County, Lake County along a line from Paisley to Fort Rock, between the Blue Mountains and the Columbia River, and the immediate vicinity of Bend, Madras, and Prineville.

Recent data are only slightly better. Only the studies by Cottrell (1981) in Wallowa County, Johnstone et al. (1980) in Harney County (26,937 km²), Henjum (1987) in Baker and Union Counties, and Janes (1985b) in Wasco County (137 km²) and Morrow County (185 and 449 km²) and a handful of casual observations give us any indication of present breeding densities (Table 1). Nevertheless, these meager data indicate that the Swainson's Hawk is still widely distributed in the central and eastern portions of the state with the greatest densities located along the northern foothills of the Blue and Wallowa Mountains. However, even in this area their distribution is spotty. I have spent considerable time in Jefferson, Wasco, Wheeler, Sherman, Gilliam, and Morrow Counties since 1973, and I have located only 4 areas in which Swainson's Hawk densities approached 2 pairs per 100 km or greater. Elsewhere, only northern Harney County and the Fort Rock Valley-Summer Lake area appear to support more than scattered pairs.

A comparison of the data from early this century with data from the past decade suggests that there has been little if any range contraction despite a marked decline in overall abundance. Only the rarity of recent observations in the Bend, Madras, and Prineville area hint at an area...
experiencing proportionally greater losses.

Even with this sketchy data, it is clear that Oregon is not in immediate danger of losing its Swainson's Hawks. Based on the 206 known breeding locations in the last decade, a population estimate of between 400 and 800 pairs for the state seems reasonable. Further, the populations I have studied appear to be reproductively healthy, each fledging young at or above the replacement rate (Janes et al. in prep.). Still, the Swainson's Hawk can no longer be considered a common bird in Oregon, much less one of the most abundant breeding birds of prey east of the Cascades (Gabrielson and Jewett 1940). Their numbers have markedly diminished over the last 60-plus years throughout Oregon, and there is little evidence to suggest that the decline has stopped or even slowed.

<table>
<thead>
<tr>
<th>Table 1. Breeding records of Oregon Swainson's Hawks by county. Egg records were obtained from the collections at the Western Foundation of Vertebrate Zoology. Sources are indicated for the more recent data.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Egg Sets</strong></td>
</tr>
<tr>
<td>County</td>
</tr>
<tr>
<td>Baker</td>
</tr>
<tr>
<td>Crook</td>
</tr>
<tr>
<td>Deschutes</td>
</tr>
<tr>
<td>Gilliam</td>
</tr>
<tr>
<td>Grant</td>
</tr>
<tr>
<td>Harney</td>
</tr>
<tr>
<td>Jefferson</td>
</tr>
<tr>
<td>Klamath</td>
</tr>
<tr>
<td>Lake</td>
</tr>
<tr>
<td>Malheur</td>
</tr>
<tr>
<td>Morrow</td>
</tr>
<tr>
<td>Sherman</td>
</tr>
<tr>
<td>Umatilla</td>
</tr>
<tr>
<td>Union</td>
</tr>
<tr>
<td>Wallowa</td>
</tr>
<tr>
<td>Wasco</td>
</tr>
<tr>
<td>Wheeler</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

There is other disturbing information from just across the border in California. The Swainson's Hawk population in the Lower Klamath Lake area has experienced a sharp and steady decline in reproductive success since the birds were first observed by Pete Bloom in 1979 (Janes et al. in prep.). The decline does not appear to be a transient phenomenon. Raptor populations often experience years of poor reproductive performance interspersed among better years (e.g. Janes 1980, Smith et al. 1981). If the trend persists, we may be witnessing the demise of one of the few remaining Swainson's Hawk populations in California. As yet there is no apparent explanation for the deterioration in reproductive success at this site.

The Possible Role of Habitat and Competition in the Decline of Oregon Swainson's Hawks

Thus far, an explanation for the decline in Swainson's Hawk abundance in western populations has been elusive. Pesticides do not appear to be a factor (Schlorff et al. manuscript) nor does reproductive failure, the recent observations of the population about Lower Klamath Lake notwithstanding. Events along migration routes to South America or on their wintering area may be important, but little is known about Swainson's Hawk at these times. However, the geographic differences in population trends among breeding populations makes it unlikely that the decline can be attributable to events in South America. Such an explanation would require that the Great Plains populations, which appear to be stable, occupy a wintering area distinct from the declining California and intermountain populations.

While there is much we do not know, my work with Swainson's Hawks over the last decade suggests that habitat changes have been important in their decline both directly through habitat loss (agriculture) and indirectly through effects of competing species, particularly the Red-tailed Hawk.

On the breeding area, Swainson's Hawks seldom occur in the absence of either or both Red-tailed and Ferruginous Hawks. Where the different species meet, they usually react aggressively resulting in a mosaic of largely non-overlapping territories (Thiollay 1981, Rothfels and Lein 1984, Janes 1984a, 1985a). The interactions between Swainson's and Red-tailed Hawks are particularly hostile involving continued aggressive encounters throughout the breeding season. Interspecific territoriality by itself is usually an indication of interspecific competition (Orians and Willson 1964).

Besides antagonistic behavior there is other evidence to suggest that these species compete. Sympatric populations usually feed on similar prey...
among these species are far from clear. Though it is apparent that habitat differences exist, the habitat relations and specific plant associations were also important. In contrast, Cottrell continued coexistence of these species. Habitat differences have been noted among several sympatric populations. Schmutz et al. (1980) found Ferruginous Hawks to occupy prairie habitat while Red-tailed Hawks were most abundant in the more heavily treed parkland. Swainson's Hawks were most common along the ecotone between the two. Smith and Murphy (1973) also mentioned the importance of tree density but suggested that topography and specific plant associations were also important. In contrast, Cottrell (1981) found the 3 species to inhabit areas with different plant associations and aspect but made no mention of differences with respect to tree density. Though it is apparent that habitat differences exist, the habitat relations among these species are far from clear.

The statistical analyses of the 253 buteo territories I studied produced 2 significant habitat gradients along which the 3 hawk species segregate (Janes 1985a,b). The first and most important gradient explained 46 percent of the observed variation and reflects a perch density gradient. In agreement with the findings of Schmutz et al. (1980), Red-tailed Hawks occupied the portion of the gradient with the greatest abundance and dispersion of perches while Ferruginous Hawks occupied habitat with the fewest perches. Swainson's Hawks occupied an intermediate position but closer to the position of Ferruginous Hawks.

The analyses also revealed that the density of perches need not be great before Red-tailed Hawks can inhabit an area. For example, on the Antelope site, the mean territory size of Red-tailed Hawks is 2.54 km (Janes 1985b). As few as 8 perches scattered evenly throughout an area of this size can enable a pair of Red-tailed Hawks to establish a territory though the reproductive success of a pair on such a territory is usually very low (Janes 1984a). Nevertheless, Red-tailed Hawks occupy space that would be suitable for Swainson's Hawk occupancy, according to these analyses. Red-tailed Hawk territories of the same size with 12 evenly distributed perches on the Antelope area would be expected to fledge young at the replacement rate of 1.33 young per year (Henny and Wight 1972).

The association of Red-tailed Hawks with habitat relatively rich in perches apparently reflects their dependence upon perches as a position from which to scan for prey (Fitch et al. 1946, Brown and Amadon 1968, Thiollay 1981, Janes 1984a). Ferruginous and Swainson's Hawks rely to a much greater extent on flight as a position from which to search for prey (Bowles and Decker 1934, Bent 1937, Weston 1969, Smith and Murphy 1973, Fitzner 1978, Wakeley 1978, Thiollay 1981, Bechard 1982, Janes unpublished data) and hence may occupy more open habitats.

The second discriminant axis explains an additional 30 percent of the observed variation (Janes 1985a, b), which emphasizes habitat differences between Swainson's and Ferruginous Hawks. It reflects a gradient of habitat types extending from the low rolling bunchgrass prairies of eastern Washington and northeastern Oregon at one extreme to the ecotone between the pinyon/juniper forest and the shrubsteppe characteristic of the Great Basin at the other. Swainson's Hawks were associated with the bunchgrass prairies.

A second component of this axis appears to involve soil depth. Swainson's Hawks are associated with deep soils as indicated by the absence of outcrops and steep slopes and the presence of cultivated land. Though more common along the pinyon-juniper/shrubsteppe ecotone, Ferruginous Hawks also inhabit the bunchgrass prairies, but they tend to reside in areas with relatively shallow soils.

Soil depth influences the distribution of certain prey species. Burrowing species such as ground squirrels (Spermophilus spp.) and pocket gophers (Thomomys spp.) are confined to soils sufficiently deep for their burrows. Both mammals are important prey species to the Swainson's Hawk (Janes 1984a).

In summary, Swainson's Hawk habitat is characterized by low rolling bunchgrass prairies, supporting only scattered trees. Prior to the 20th century, the most common trees in the bunchgrass prairies included willows (Salix spp.) bordering perennial streams. On the Heppner site where willows were common, Swainson's Hawks frequently used them for nesting sites, but the same trees were seldom used by other buteos. Red-tailed and Ferruginous Hawks may tend to avoid willows because the slender branches may not support the larger nests of these hawks. Interspecific differences in nesting requirements further enhance habitat segregation.

Wherever two or more buteo species co-occurred, they regularly interacted (Janes 1985b). Interactions ranged from merely soaring together with no obvious antagonistic behavior (although one bird may have flown vigorously from the opposite corner of its territory to approach the second bird) to attacks (stoops and chases). The nature and intensity of these interactions varied greatly from area to area. A number of factors appear to influence the rate and intensity of the interactions including species identity, the density of breeding pairs, and the density and dispersion of prey.

Of the 3 possible pair combinations, the interactions between the Swainson's and Red-tailed Hawks are most intense, with encounters oc-
currying at the greatest frequency and involving the highest levels of aggression. On the Antelope site encounters took place at a rate of almost 3/pair/hour (Janes 1984a). The basis for much of this interspecific antagonistic behavior appears to be territorial (Janes 1984a, 1985b).

The Swainson’s Hawk is most often the aggressor in interspecific buteo interactions. Although it is the smallest of the 3 species, the Swainson’s Hawk was the aggressor in 82 and 84 percent of the aggressive encounters involving Red-tailed and Ferruginous Hawks, respectively (n=148 and 25). While a number of factors may contribute to the relative aggressiveness of the Swainson’s Hawk, small body size confers an advantage with respect to flight performance. Andersson and Norberg (1981) have demonstrated, theoretically, that smaller birds have an advantage in maneuverability. More important to buteos, perhaps, smaller birds can gain altitude faster and under more circumstances than larger birds by virtue of lower wing loading (Janes 1985a,b). In thermals, smaller birds can achieve a higher position than larger birds for the same reason (Cone 1962). Wing loading, the ratio of wing area to weight, is principally a function of body size (Greenewalt 1975). The Swainson’s Hawk, because of its relatively low wing loading, is usually able to gain a position above both Red-tailed and Ferruginous Hawks in the air. Relative height determines which bird can initiate an attack and ultimately the outcome of an aerial encounter in most cases.

Red-tailed Hawks in the northern intermountain region usually arrive on the breeding area in early and mid-March though a few remain on their breeding territories throughout the winter (Janes 1984a, 1985b). Immediately upon their arrival, Red-tailed Hawks attempt to establish breeding territories, and intraspecific encounters are numerous during March. On the Antelope area where the pattern of territorial occupancy has been most closely studied, reoccupation of previously held territories is the rule (Janes 1984b).

Most Swainson’s Hawks arrive on the breeding area during the first half of April. They immediately begin to establish territories, sometimes in areas defended by the earlier arriving Red-tailed Hawks. If this occurs, the resulting contest can involve repeated attacks over a 1- or 2-day period (Janes 1984a). The Red-tailed Hawk attempts to expel the Swainson’s Hawk, but each time the Red-tailed Hawk challenges the Swainson’s Hawk, the Swainson’s Hawk gains a superior position and drives off the Red-tailed Hawk. The Red-tailed Hawk usually relinquishes at least a portion of the contested land, and the resulting boundaries are defended by each until near the end of the breeding cycle. These observations suggest that the Swainson’s Hawk is dominant with respect to other buteos and therefore is not limited by them. However, the story is not so simple. A distinction needs to be made between short-term and long-term competitive advantage. While Swainson’s Hawks may displace Red-tailed Hawks from portions of their territories, an analysis of the habitat usurped by Swainson’s Hawks reveals that they are successful in displacing Red-tailed Hawks from only certain habitat.

Of the 12 habitat variables important in the discriminant function analysis (Janes 1985a,b), Red-tailed Hawks lost habitat to a greater degree than expected by chance with respect to only four features (Janes 1985b). Three of the 4 variables involved perches at moderate to high densities, and the fourth involved the incidence of outcrops. Of these, only habitat with perches at moderate densities (5-9 perches/16.2 ha) was lost more often than expected by chance.

In other words, Swainson’s Hawks displaced Red-tailed Hawks from areas with moderate perch densities while Red-tailed Hawks successfully retained habitat containing higher perch densities and outcrops. The latter may either reflect features not contested by Swainson’s Hawks or features Red-tailed Hawks defend with greater success.

An analysis of reproductive performance in relation to habitat among both species provides support for the second hypothesis. Red-tailed Hawk territories at the Antelope site experienced a wide range of fledging rates including territories on which pairs failed to fledge a single young in 10 years (Janes 1984a). Low perch densities and few outcrops characterized low quality Red-tailed Hawk territories, habitat more characteristic of Swainson’s Hawks. Swainson’s Hawks were common at this site and yet caused only relatively small changes in the habitat occupancy of Red-tailed Hawks, even in marginal territories where Red-tailed Hawks may be more likely to desert.

Although Swainson’s Hawks occupied a wide range of habitat types on the Tulelake site, they exhibited no significant differences in reproductive success (mean young fledged per pair per year) among territories (Janes and Bloom manuscript). This suggests that Swainson’s Hawks occupied only preferred habitat. Otherwise declining reproductive rates in marginal habitats is anticipated. Further, habitat not occupied by Swainson’s Hawks contained relatively higher tree densities and a greater incidence of outcrops, areas occupied by Red-tailed Hawks (Janes 1985b). This together with reproductive patterns at this site suggest that Red-tailed Hawks may exclude Swainson’s Hawks from areas with a relative high incidence of perches and outcrops.

However, there is an alternate explanation. If Swainson’s Hawks were relatively rare in comparison with available habitat, they would be expected to occupy only the best habitat (Fretwell and Lucas 1969). Thus the possibility remains that Swainson’s Hawks might displace Red-tailed...
Habitat Changes in the Intermountain West and the Outlook for the Swainson's Hawk

The intermountain west has undergone many changes in the last 100 years. Modern agriculture has converted much of the bunchgrass prairie into cropland, primarily dryland wheat. Dryland wheat farming involves the fallowing of fields on alternate years and preventing any vegetation from growing between crops. This allows the scant precipitation to collect in the soil over a 2-year period in order to grow wheat during 1 without the benefit of irrigation. This practice has the effect of virtually eliminating small rodents, particularly ground squirrels and pocket gophers (Turner 1972), primary prey of the Swainson’s Hawk at least until the young are fledged. After fledging, insects often become a major source of food for Swainson’s Hawks (Janes, Pete Bloom unpublished data).

The result is that dryland wheat farming markedly decreases the suitability of much Swainson’s Hawk habitat. However, Swainson’s Hawks with their relatively small territories (compared to other buteos) are often able to successfully occupy wheat country by foraging in small areas of uncultivated land between fields. These narrow strips of land often harbor abundant prey (Janes 1984a). Consequently, analyses of habitat preference in Swainson’s Hawks may not reflect the degree to which cultivated land is unsuitable.

There have been other habitat changes as well. Cattle, sheep, and horses were introduced, frequently resulting in major changes in the native vegetation (Franklin and Dyrness 1973). One change involves a reduction in riparian vegetation. The loss of willows eliminates important potential nesting sites for Swainson’s Hawks in areas lacking other nesting opportunities. Just as important, willows do not provide the other buteos the same nesting opportunities.

Another important consequence of grazing has been a reduction in the incidence of fire. Fewer fires have also resulted from human efforts to actively reduce its occurrence. One result has been a dramatic increase in the range and abundance of junipers (Juniperus spp.; Burkhardt and Tisdale 1976). For example, on the Antelope study area, the earliest aerial photographs conducted by the Agriculture Stabilization and Conservation Service in 1937 recorded a single juniper in a small (33 ha) watershed. That same area contained 262 junipers greater than 2 m tall in 1979. Habitat that was certainly unsuitable for Red-tailed Hawks in 1937 and likely Swainson’s Hawk habitat is now used by 2 pairs of Red-tailed Hawks and no Swainson’s Hawks during the breeding season. A pair of Swainson’s Hawks inhabited the basin from my first survey of the area in 1975 through 1979. The pair has not been seen since, and a pair of Red-tailed Hawks now uses the area.

The spread of junipers is not the only change that has introduced a third dimension to an essentially two-dimensional habitat (from the standpoint of elevated perches). Homesteaders, under the Homestead Act of 1862, brought future perches with them in the form of black poplars (Populus nigra), black locusts (Robinia pseudo-acacia), and other shade trees. Many homesteads were abandoned in the 1920s and 1930s, but the trees remain. Lines of utility poles were also introduced marching up to most of the houses and wells. In a valley of scattered farms and now abandoned homesteads, the effect of utility poles and scattered trees upon the Swainson’s Hawk can be easily overlooked. Considering that it takes as few as 8 perches in a square mile to make an area suitable for occupancy by Red-tailed Hawks (Janes 1984a), such “minor” additions to the landscape can have a profound effect. The direct and indirect effects of humans with respect to perches in the intermountain region during the last century have been to create abundant new Red-tailed Hawk habitat at the expense of Swainson’s Hawks. Together with outright habitat loss due to farming and loss of riparian habitat, these factors have markedly reduced available breeding habitat to Swainson’s Hawks.

The processes that reduced the availability of Swainson’s Hawk breeding habitat are continuing today. In the last 10 years more and more bunchgrass habitat has been converted into cropland, and the expansion of...
juniper woodlands continues except in cases where they have been actively removed by chaining or poisoning.

Acknowledgements

This study was conducted with funding from the Audubon Society of Portland, Oregon Environmental Foundation, and the Pacific Northwest Chapter of The Nature Conservancy with assistance from the Rose Tucker Foundation.

LITERATURE CITED


Janes, S.W. 1985b. Behavioral interactions and habitat relations among grassland and shrubsteppe raptors. Diss. Univ. of California, Los Angeles, CA.

Janes, S.W., P.H. Bloom, R.R. Olendorff, and S.J. Hawks. Swainson’s Hawk reproductive biology and relations to recent population declines. Unpubl. ms.


A SYNOPSIS OF BREEDING BIRD STUDIES ON HART MOUNTAIN NATIONAL ANTELOPE REFUGE

Ken Voget & William H. Pyle, P.O. Box 111, Lakeview, Oregon 97630

Hart Mountain National Antelope Refuge is situated in eastern Lake County, south central/southeast Oregon. It comprises about 250,000 acres of high desert — Great Basin habitat (sagebrush) and, at an average elevation of 6200 feet, is one of the coldest places in Oregon. It is one of the last places in Oregon to witness any “spring” migration; it can receive snow any month of the year; it is not on a main road to anywhere; it has some of the worst back country roads in the state; and the hot springs can hold only 6 adults comfortably.

Aside from all that, many people do know that in the appropriate season, Hart Mountain is also one of the greatest places in Oregon to observe wildlife.

There is no typical “spring” season on the mountain; there is simply a transition from winter to summer within a few days. There are some nice...
days during the “spring” between snow storms, when a person can venture out searching for indications of “spring” (buttercups and the first Vesper Sparrow), and usually wind up stuck in a thawing mud hole. This season extends from March through 2 days after Memorial Day weekend. All of a sudden, on a sunny day in early June, it’s summer and all the birds are back — on territories and nesting. This, and the appearance of mosquitoes, happens overnight. The birds arrive at Hart Mountain from somewhere between Peru and Reno ready to lay eggs. It all happens very quickly.

Hart Mountain Refuge sits as a high fortress on the western edge of the Great Basin, a topographic island surrounded by miles and miles of sagebrush. As an island, it attracts a wide variety of bird-life, species indigenous to the Great Basin as well as species representative of the coniferous habitat of the Warner Mountains. It also attracts those who study birds.

Many naturalists and ornithologists have found their way to Hart Mountain over the years to study the vertebrate species occurring there. In recent years, professional ornithologists have visited the area to study the avifauna in their native breeding habitats. Gabrielson, Jewett, and Oberholser were regular visitors to Hart Mountain, compiling numerous records and accounts of birds found. L. Richard Mewaldt (professor emeritus, San Jose State University) studied birds for nearly 10 years in the relict pine stand commonly known as Blue Sky (1972-1982). More recently, Steven G. Herman (The Evergreen State College) has used the Refuge as an outdoor classroom and field laboratory for advanced ornithology students.

The published and unpublished studies are numerous, with a wealth of data being collected over the years. Mewaldt, in studying the population biology of breeding birds within the Blue Sky riparian area, captured, banded, and released nearly 13,000 birds. He and those working with him spent countless field hours significantly adding to species accounts for the area. The list of vagrants documented by Mewaldt during his study is impressive. Many have become significant records for Oregon. Mewaldt, with some of his associates, has published specific papers on the isolated breeding populations of Cassin’s Finch and Mountain White-crowned Sparrow (Zonotrichia leucophrys oriantha) resulting from studies conducted at Hart Mountain.

In 1983, Herman established Breeding Bird Censuses (BBC) plots on Hart Mountain, focusing on the shrub/steppe, or mountain brush zone, plant community. This zone harbors an abundance of breeding birds found in the Great Basin second only to riparian habitats. Herman’s research objectives at Hart Mountain were: (1) determine breeding bird densities within this zone; (2) describe correlations between bird populations and plant community attributes; (3) evaluate succession for bird/plant associations; and (4) describe the breeding biology of shrub/steppe passerines. The students received college credit for their work. At the same time they were contracted as volunteers for the Refuge. In addition to Breeding Bird Census and vegetation analysis, the volunteers also surveyed cavity nesting species within the aspen riparian habitats, conducted raptor nest inventories, and routinely counted waterfowl, marsh, water and shorebirds on the larger wetland areas of Hart Mountain. From 1983 through 1986, the students arrived when “spring” was supposed to begin (April) and remained through the breeding season to August 1.

Habitat altering (or successional events) that occurred during the Breeding Bird Censuses of 1983-1986 make this work significant. In 1982, an outbreak of the Great Basin Moth (Malacosoma fragilis) began. In its larval form, it forages almost exclusively on bitterbrush (Purshia tridentata). Defoliation often results. Severe defoliation, if sustained for 2 to 3 years, will kill the shrub. Bitterbrush is a key browse plant for mule deer in the fall months and an important nest substrate for passerines. As a dominant shrub in the mountain brush zone, it adds significantly to bird and plant community diversity at Hart Mountain. Concurrent with the moth outbreak, the region received record precipitation, creating the highest water levels in recent history. Pluvial lakes in Warner and Guano Valleys were flooded; several wet meadow habitats on the Refuge became marshes; intermittent streams became perennial flows. Prescribed burning was reinstituted as a management tool by the Refuge during this same period. Prescribed fire objectives included enhancing the diversity of successional habitats through habitat interspersion, and enhancement of species diversity. Assisted by Herman, the student volunteers enabled the Refuge to monitor responses of wildlife to natural succession events and management.

As a result of these efforts, a wealth of information has recently been collected on the birds of Hart Mountain. In 1939, a Biological Survey paper listed 120 bird species occurring on Hart Mountain. Today, largely due to the work of Mewaldt, Herman and volunteers, the current refuge bird list includes 260 species.

Highlights of recent investigations include:

1972-1979 — Notable vagrant passerines captured by Mewaldt were Prothonotary Warbler, Northern Waterthrush, Gray Catbird, Rose-breasted Grosbeak, American Redstart, Chestnut-sided Warbler, Least Flycatcher, Yellow-billed Cuckoo, Virginia’s Warbler, Blackpoll Warbler, Ovenbird, Summer Tanager, Scarlet Tanager, and Brown Thrasher.

1976 — Discovery of Flammulated Owl migration through Blue Sky during May and September; suspect breeding historically and perhaps
currently in optimum years (Mewaldt).
1982 — Discovery of small breeding colony of American Crow in Hart Canyon (Mewaldt).
1985 — Documented breeding population of Blue-gray Gnatcatcher on Hart Mountain (So. Mt.), (volunteers).
1986 — Banding by refuge staff illustrates peaks of fall migratory movements of individual species (see fig. 1).
1986 — Summary of cavity nest survey by volunteers in aspen riparian sites (see fig. 2).

Hart Mountain National Antelope Refuge thankfully acknowledges the contributions of the following individuals: Dr. and Mrs. Mewaldt, James King and all those who spent a few days, weeks or months in the camp at Blue Sky; Herman and the volunteers associated with Malheur Field Station — Cara Stiles, George Wallace, William Pyle, Siobhan Sullivan, David St. George, Beth Brown St. George, Angela Percival, Rod MacDonald, Celese Brune, Bruce Donohue, and Steve Shane.

Summary of individual birds counted and number of active nests located, by species, in 6 aspen riparian watersheds on Hart Mountain National Antelope Refuge, 1984 and 1985.

<table>
<thead>
<tr>
<th>Species</th>
<th>Number of individuals seen 1984</th>
<th>Number of active nests located 1984</th>
<th>Number of individuals seen 1985</th>
<th>Number of active nests located 1985</th>
</tr>
</thead>
<tbody>
<tr>
<td>House Wren</td>
<td>172</td>
<td>50</td>
<td>200</td>
<td>72</td>
</tr>
<tr>
<td>European Starling</td>
<td>84</td>
<td>28</td>
<td>93</td>
<td>46</td>
</tr>
<tr>
<td>Northern Flicker</td>
<td>56</td>
<td>23</td>
<td>71</td>
<td>31</td>
</tr>
<tr>
<td>Tree Swallow</td>
<td>34</td>
<td>19</td>
<td>53</td>
<td>13</td>
</tr>
<tr>
<td>Mountain Bluebird</td>
<td>20</td>
<td>5</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>American Kestrel</td>
<td>10</td>
<td>5</td>
<td>19</td>
<td>4</td>
</tr>
<tr>
<td>Red-naped Sapsucker</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Downy Woodpecker</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Western Screech-Owl</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Hairy Woodpecker</td>
<td>2</td>
<td>1</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Red-breasted Nuthatch</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Mountain Chickadee</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Frequency of encounters at banding station illustrates chronology of fall movements in avian species; table illustrates period of 1 August to 1 October 1986 at Hart Mountain station for 8 common species.

Lines indicate period of occurrence; width of lines across from species indicates abundance; wider equals more.
Vast, remote, and generally inaccessible, Sycan Marsh is a 25,000-acre wetland system, situated at 5000 feet above sea level, surrounded by lodgepole (Pinus contorta) and ponderosa pine (P. ponderosa) forests in south-central Oregon. The marsh lies in a basin, bounded on the east by the gentle west-sloping flank of Winter Rim, and on the west by the Yamsey Mountain shield volcano.

Sycan Marsh, formerly owned by the ZX Land and Cattle Company, was acquired by The Nature Conservancy in 1980. Since 1980, extensive inventory, monitoring and research programs have garnered much information about the vertebrates, plant communities, hydrology, and overall ecology of the marsh. Here, we provide a brief description of the hydrological factors influencing the marsh, the habitat types used by avian species, and a summary of avian activity and important sightings at Sycan.

Water flow to the marsh comes principally in the form of snowmelt from adjacent peaks and rims. Annual water levels on the marsh vary greatly year to year. In recent years, 1981 was exceedingly dry, 1982-1984 were considerably wetter than average, and 1985-1986 were characteristic of the long-term mean. Unlike marshes of the Intermountain West, Sycan is an open drainage, with water draining via the Sycan, Sprague, Williamson and Klamath Rivers to the Pacific Ocean.

Water levels on Sycan Marsh also vary greatly within seasons. Peak flows occur in early spring, with water levels receding throughout the summer. Often much of the marsh is dry by mid-August. These variable water conditions, coupled with slight elevational differences throughout the marsh give rise to a diverse series of habitats. The wettest habitats include a 3000-acre hardstem bulrush (Scirpus acutus) sump in the northeast corner of the marsh, and 9000 acres of rush, broadleaf sedges, and spike rush (Juncus nevadensis, Carex vesicaria, C. rostrata, Eleocharis palustris) in the central portions of the marsh where the Sycan River, Long Creek and Dry Creek flow together. A wet meadow community of tufted hairgrass (Deschampsia caespitosa) occupies 8000 acres adjacent to the sedge-rush habitats, and 5000 acres of bluegrass flats (Poa cusickii, P. nevadensis, P. pratensis) occur along the edge of the marsh and pine forest. The forest is
MEMBERSHIP IN OFO BRINGS YOU

- **Oregon Birds** — OFO’s quarterly journal with news briefs of interest to Oregon birders • short notes and articles on status and identification of Oregon's birds • bird-finding guides to Oregon's better birding spots and rarer species • reviews of printed material of interest to Oregon's birders.

- **Proceedings of the Oregon Bird Records Committee** — OFO members stay current on the rare birds of Oregon.

- **Annual meetings** — As a member, you are invited to participate in OFO’s birding meetings, held at some of Oregon’s top birding spots.

- **Publications** — OFO publishes useful field cards and field checking sheets accurate according to the Official Checklist of Oregon birds prepared by the Oregon Bird Records Committee.

---

OREGON FIELD ORNITHOLOGISTS
APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

1. Name

2. Address

3. City State Zip

4. Telephone

5. ☐ $12.00 Individual  ☐ $15.00 Family  ☐ $20.00 Sustaining  ☐ $12.00 Renewal

6. ☐ New member

7. Make check payable to Oregon Field Ornithologists or OFO, and mail to the Treasurer, P.O. Box 10373, Eugene, OR 97440

---

OFO BOOKCASE and MEMBERSHIP APPLICATION
June 1987 — August 1987

Oregon Field Ornithologists makes publications dealing with the birds of Oregon available by mail. If you know of other publications which might be of interest to OFO members, please write to the Treasurer. Use this form to order publications, renew your membership, and for new memberships.

<table>
<thead>
<tr>
<th>Oregon Field Ornithologists</th>
<th>EACH</th>
<th>ORDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>1987 Membership</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individual</td>
<td>$12.00</td>
<td>$</td>
</tr>
<tr>
<td>Family</td>
<td>$15.00</td>
<td>$</td>
</tr>
<tr>
<td>Sustaining</td>
<td>$20.00</td>
<td>$</td>
</tr>
</tbody>
</table>

| Fill in reverse side |

| Special Publication No. 4, A Bibliography of Bird Identification Articles in Five Journals, with Crossreferences to a List of Over 580 Species. Clarice Watson, 44 pp., January 1987 | $4.00 |

| Oregon Field Ornithologists sticker | $1.00 |
| OFO’s Field Checking Card (fits into field guide) | $1.00 |
| 5 | $1.00 |
| 15 | $2.00 |
| 30 | $4.00 |
| 50 | $6.00 |
| 100 | $12.00 |

| OFO's Field Notes field form (full-page 3-part carbonless) | $5.00 |
| 50 | $5.00 |
| 100 | $9.00 |

| Oregon Birds back issues as available (specify): | $     |
| Volume 13, Numbers 1 & 2 | $3.00 |
| Volume 12, Numbers 2, 3, & 4 (No. 1 is out of print) | $2.00 |
| Volume 11, Numbers 1, 2-3, & 4 | $2.00 |
| Volume 10, Numbers 1, 2, & 3-4 | $2.00 |
| Volumes 6-9, Numbers 1, 2, 3, & 4 | $2.00 |
| Volume 5, Numbers 1 & 5 only | $1.00 |

| National Geographic Society Field Guide to the Birds of North America (temp. out of print) | $--- |

| TOTAL | $     |

All items postage paid. Make check payable to Oregon Field Ornithologists or OFO. Mail to the

Treasurer, P.O. Box 10373, Eugene, OR 97440
MEMBERSHIP IN OFO BRINGS YOU

- *Oregon Birds* — OFO’s quarterly journal with news briefs of interest to Oregon birders • short notes and articles on status and identification of Oregon’s birds • bird-finding guides to Oregon’s better birding spots and rarer species • reviews of printed material of interest to Oregon’s birders.

- Proceedings of the Oregon Bird Records Committee — OFO members stay current on the rare birds of Oregon.

- Annual meetings — As a member, you are invited to participate in OFO’s birding meetings, held at some of Oregon’s top birding spots.

- Publications — OFO publishes useful field cards and field checking sheets accurate according to the Official Checklist of Oregon birds prepared by the Oregon Bird Records Committee.

OREGON FIELD ORNITHOLOGISTS
APPLICATION FOR MEMBERSHIP AND MEMBERSHIP RENEWAL

1. 
   Name

2. 
   Address

3. 
   City State Zip

4. 
   Telephone

5. □ $12.00 Individual 6. □ Renewal
   □ $15.00 Family  □ New member
   □ $20.00 Sustaining

7. Make check payable to Oregon Field Ornithologists or OFO, and mail to the Treasurer, P.O. Box 10373, Eugene, OR 97440

dominated by lodgepole pine along the marsh edge, and grades into ponderosa pine on drier sites away from the marsh. Riparian corridors occur along Long Creek and the Sycan River, and small upland areas of low and silver sagebrush (*Artemisia arbuscula, A. cana*) are also found in the marsh.

The nesting population of Greater Sandhill Cranes brought The Nature Conservancy’s attention to the marsh. Research conducted in 1983 indicated that the breeding population of Greater Sandhill Cranes at Sycan Marsh numbered 126 pairs. Within the Central Valley population of cranes breeding in Oregon and California, only the Harney-Malheur Lakes Basin has more cranes (251 pairs) than Sycan. Overall, the density of nesting cranes at Sycan is one of the highest in North America.

In 1983, we initiated a research project that included the banding and color-marking of cranes at Sycan Marsh. Study of these banded birds has shown that cranes from Sycan (and presumably additional cranes from adjacent nesting areas in Lake and Klamath Counties) migrate south in late August through September, stopping over in Langell Valley, an agricultural area east of Klamath Falls, approximately 80 miles south of Sycan. The cranes typically stage in Langell Valley for 2-6 weeks, feeding on waste grain in harvested fields, then continue on to the wintering grounds in California. Most cranes from Sycan spend the first half of the winter in the northern portion of the Central Valley, near Gray Lodge Wildlife Management Area. In January and February, cranes wintering near Gray Lodge often move south to the Sacramento River Delta for 2-8 weeks, prior to their northward migration. (Tom Pogson, pers. comm.). In spring, cranes return north, again stopping over at Langell Valley for 2-4 weeks before their arrival at Sycan.

In addition to Sandhills, the marsh has notably high densities of nesting Willets, Wilson’s Phalaropes, and Black Terns. Other commonly noted marsh species include Soras, Common Snipe, Yellow-headed Blackbirds, American Coots and Marsh Wrens. A colony of approximately 30 pairs of Great Blue Herons nest in one of the aspen groves. The herons feed both on the marsh and at Thompson Reservoir, located a couple miles to the north. There is a great diversity of nesting waterfowl at Sycan Marsh, including 14 species of ducks, with Mallards and Cinnamon Teal being the most abundant. Of note, we’ve found several Ring-necked Duck nests each year. This species is a relatively rare breeder in the forested lakes of the Oregon Cascades.

Other species of note on the marsh include breeding records for Upland Sandpipers and Horned Grebes. One or 2 pairs of Upland Sandpipers have been seen each year, and in 1981 a chick was observed with an adult. In 1982, we found a Horned Grebe nest, and later observed the adult
with young. Both of these species are rare breeders in Oregon.

A pair of Bald Eagles nests in an old-growth stand of ponderosa pine at the south end of the marsh. The pair forages on the marsh, preying most frequently on American Coots. The past few years, several immature Bald Eagles have also summered on the marsh, and there appears to be adequate habitat and nest sites available to support a second pair. Time will tell.

The pine forest hosts many species. More than 8 species of woodpeckers breed here, including Black-backed and Three-toed woodpeckers, and various species of owls. In mid-April, Northern Pygmy-Owls have been heard hooting in the forest all along the west side of the marsh. Great Gray Owls nest in the stringer lodgepole meadows near Sycan, and Northwestern Saw-whet, Western Screech, Flammulated and Great Horned Owls are also present. A few Short-eared Owls have been seen on the marsh throughout the summer the past 2 years, but their breeding status is uncertain. Northern Goshawks and Swainson’s Hawks are frequently seen in and along the forest edge. Other common nesting forest species include a host of flycatchers, and the triad of nuthatches: Red-Breasted, White-breasted, and Pygmy.

In addition to nesting species, we have observed several species of interest that do not breed at Sycan. For example, a few Trumpeter Swans are often present during mid-May, and we’ve also seen White-faced Ibis, Franklin’s Gulls, Black-necked Stilts and American Avocets. In mid-July, we’ve noted Black-shouldered Kites and Great Egrets. American White Pelicans frequent the marsh periodically in both spring and summer, usually in groups of 10-25, often foraging on the marsh for periods of 24-36 hours.

During spring migration Sycan serves as an important staging area for waterfowl and Lesser Sandhill Cranes. White-fronted Geese, Cackling Canada Geese, and Great Basin Canada Geese all stop over on the marsh, with peak numbers totalling several thousand. Tundra Swans also stop, with annual counts of 1000-2000 birds. Migrating ducks, particularly Pintails, are abundant in spring, and upwards of 1000 Lesser Sandhill Cranes stage for 2-4 weeks on the marsh. In contrast, fall migration is a non-event. The marsh is typically dry in August and September, and with the exception of passing flights of Greater White-fronted Geese heard overhead in early September, little activity is noted. By mid-October, Rough-legged Hawks have arrived for the long, cold winter.

Overall, 190 species of birds have been sighted on the marsh and in the adjacent pine forest, of which approximately 130 species are probable breeders (Table 1). The avian species found at Sycan comprise a guild that includes a mixture of species found in the high-elevation lakes of the Oregon Cascades, the vast marsh systems of the Intermountain West and the marsh-wet meadow regions of the Klamath Basin. Sycan Marsh is owned and managed by The Nature Conservancy, and is open to the public with permission from the Oregon Field Office. The Conservancy periodically offers organized field trips to Sycan.

Numerous individuals have assisted in observing and recording information about avian species at Sycan Marsh. In particular, we thank the following for their assistance: Geoff Pampush, C.D. Littlefield, Joanne Vrilakas, Christy Galen, Ginny Rosenberg, Stuart Schultz, Eric Horvath, Joe Vranizan, Karen Theodore, and Julie Goodnight.
R  Rare—either of very local distribution, or if more widely distributed, then seen on fewer than 10% of the visits to proper habitat in proper season; can be expected annually.
CS Casual—fewer than 10 records; to be expected again, but not on a regular basis.

**SPECIES**

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>Sp</th>
<th>Su</th>
<th>F</th>
<th>W HABITAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pied-billed Grebe*</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>WM,T</td>
</tr>
<tr>
<td>Horned Grebe*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>T</td>
</tr>
<tr>
<td>Red-necked Grebe</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td>T</td>
</tr>
<tr>
<td>Eared Grebe*</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td>WM,T</td>
</tr>
<tr>
<td>American White Pelican</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>WS</td>
</tr>
<tr>
<td>Western Grebe</td>
<td>C</td>
<td>C</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Great Blue Heron*</td>
<td>C</td>
<td>C</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Great Egret</td>
<td>CS</td>
<td>CS</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Snowy Egret</td>
<td>CS</td>
<td>CS</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Black-crowned Night Heron</td>
<td>U</td>
<td>U</td>
<td>CW</td>
<td>WM,R,T</td>
</tr>
<tr>
<td>White-faced Ibis</td>
<td>CS</td>
<td>CS</td>
<td>U</td>
<td>WM</td>
</tr>
<tr>
<td>Tundra Swan</td>
<td>CS</td>
<td>CS</td>
<td>U</td>
<td>WM</td>
</tr>
<tr>
<td>Trumpeter Swan</td>
<td>CS</td>
<td>CS</td>
<td>CS</td>
<td>WM,T</td>
</tr>
<tr>
<td>White-fronted Goose</td>
<td>R</td>
<td>R</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Snow Goose</td>
<td>CS</td>
<td>CS</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Great Basin Canada Goose*</td>
<td>A</td>
<td>C</td>
<td>C</td>
<td>WM,T</td>
</tr>
<tr>
<td>Cackling Canada Goose</td>
<td>R</td>
<td>R</td>
<td>WM</td>
<td></td>
</tr>
<tr>
<td>Wood Duck*</td>
<td>R</td>
<td>R</td>
<td>WM,T</td>
<td></td>
</tr>
<tr>
<td>Green-winged Teal*</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td>WM,T</td>
</tr>
<tr>
<td>Mallard*</td>
<td>A</td>
<td>A</td>
<td>U</td>
<td>WM,R,T</td>
</tr>
<tr>
<td>Northern Pintail*</td>
<td>A</td>
<td>A</td>
<td>U</td>
<td>WM</td>
</tr>
</tbody>
</table>

*Black-necked Stilts are rare visitors to Sycan Marsh. Photo/Dan Sherman.*

**OREGON BIRDS 13(2): 188, 1987**
<table>
<thead>
<tr>
<th>SPECIES</th>
<th>Sp</th>
<th>Su</th>
<th>F</th>
<th>W</th>
<th>HABITAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solitary Sandpiper</td>
<td>CS</td>
<td></td>
<td></td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Willet*</td>
<td>C</td>
<td>C</td>
<td>U</td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Spotted Sandpiper</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td>R,WM</td>
</tr>
<tr>
<td>Upland Sandpiper*</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Long-billed Curlew*</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
<td>WM,S</td>
</tr>
<tr>
<td>Western Sandpiper</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Least Sandpiper</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Baird's Sandpiper</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Pectoral Sandpiper</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Short-billed Dowitcher</td>
<td>U</td>
<td>CS</td>
<td></td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Long-billed Dowitcher</td>
<td>C</td>
<td>A</td>
<td>U</td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Common Snipe*</td>
<td>C</td>
<td>A</td>
<td>U</td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Wilson's Phalarope*</td>
<td>C</td>
<td>A</td>
<td>U</td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Franklin’s Gull</td>
<td>CS</td>
<td></td>
<td></td>
<td></td>
<td>WM,T</td>
</tr>
<tr>
<td>Bonaparte’s Gull</td>
<td>CS</td>
<td></td>
<td></td>
<td></td>
<td>WM,T</td>
</tr>
<tr>
<td>Ring-billed Gull</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td></td>
<td>WM,T</td>
</tr>
<tr>
<td>California Gull</td>
<td>U</td>
<td>CS</td>
<td>U</td>
<td></td>
<td>WM,T</td>
</tr>
<tr>
<td>Caspian Tern</td>
<td>CS</td>
<td></td>
<td></td>
<td></td>
<td>T</td>
</tr>
<tr>
<td>Forster's Tern*</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
<td>WM,T</td>
</tr>
<tr>
<td>Black Tern*</td>
<td>C</td>
<td>A</td>
<td>R</td>
<td></td>
<td>WM,T</td>
</tr>
<tr>
<td>Mourning Dove*</td>
<td>U</td>
<td>C</td>
<td>C</td>
<td></td>
<td>F,S</td>
</tr>
<tr>
<td>Common Barn-Owl</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td></td>
<td>F,WM</td>
</tr>
<tr>
<td>Flammulated Owl*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Western Screech-Owl*</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Great Horned Owl*</td>
<td>C</td>
<td>C</td>
<td>U</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Northern Pygmy-Owl*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Great Gray Owl*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Long-eared Owl</td>
<td>R</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td>F,R</td>
</tr>
<tr>
<td>Short-eared Owl</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td>WM</td>
</tr>
<tr>
<td>Northern Saw-whet Owl*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Common Nighthawk*</td>
<td>R</td>
<td>C</td>
<td>R</td>
<td></td>
<td>F,WM,S</td>
</tr>
<tr>
<td>Common Poor-will</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F,S</td>
</tr>
<tr>
<td>Vaux’s Swift</td>
<td>R</td>
<td>R</td>
<td></td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Calliope Hummingbird</td>
<td>CS</td>
<td>CS</td>
<td></td>
<td></td>
<td>F,R</td>
</tr>
<tr>
<td>Rufous Hummingbird*</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td></td>
<td>WM,R</td>
</tr>
<tr>
<td>Belted Kingfisher</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lewis’ Woodpecker</td>
<td>CS</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Red-naped Sapsucker*</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
<td>F,R</td>
</tr>
<tr>
<td>Williamson’s Sapsucker*</td>
<td>U</td>
<td>U</td>
<td>R</td>
<td></td>
<td>F,R</td>
</tr>
<tr>
<td>Downy Woodpecker*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F,R</td>
</tr>
<tr>
<td>Hairy Woodpecker*</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>White-headed Woodpecker*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Three-toed Woodpecker</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td>F</td>
</tr>
</tbody>
</table>

Black-backed Woodpecker*  | U  | U  | U |   | F       |
Northern Flicker*         | C  | C  | C | R | WM,S,F  |
Olive-sided Flycatcher*    | C  | A  | C |   | F       |
Western Wood Pewee*       | R  | R  | R |   |         |
Willow Flycatcher*        | R  | R  | R |   |         |
Hammond’s Flycatcher*     | U  | U  |   |   | F       |
Dusky Flycatcher*         | C  | C  | U |   | F       |
Gray Flycatcher*          | U  | U  |   |   | S       |
Say’s Phoebe              | R  | R  | R |   | WM,S    |
Western Flycatcher         | R  | R  | R |   | F,R     |
Ash-throated Flycatcher*  | R  | R  | R |   | WM,S    |
Western Kingbird*         | R  | R  | R |   | WM,S    |
Horned Lark*              | A  | A  | C |   | WM      |
Tree Swallow*             | A  | A  | C |   | WM      |
Violet-green Swallow*     | U  | U  | U |   | WM,S    |
Northern Rough-winged Swallow* | R | R | R |   |
Bank Swallow              | CS |    |   |   |         |
Cliff Swallow*            | C  | C  | C |   |         |
Barn Swallow*             | C  | A  | A |   |         |
Gray Jay*                 | U  | R  | U |   | F       |
Steller’s Jay*            | U  | R  | U |   | F       |
Clark's Nutcracker*       | R  | R  | C |   | F       |
Black-billed Magpie*      | C  | C  | U |   | WM,S    |
Common Raven*             | C  | C  | A |   |         |
Mountain Chickadee*       | C  | A  | C | U | F,R     |
Bushtit*                  | R  | R  | R |   | F,R     |
Red-breasted Nuthatch*    | U  | C  | C | U | F       |
White-breasted Nuthatch*  | U  | U  | U |   | F       |
Pygmy Nuthatch*           | U  | U  | U |   | F       |
Brown Creeper*            | C  | C  | C |   | F       |
Rock Wren*                | U  | U  | C |   | F,R     |
House Wren*               | C  | C  | C |   | F,R     |
Marsh Wren*               | C  | C  | U |   | WM,L,T  |
Golden-crowned Kinglet*   | R  | U  | U | R | F       |
Ruby-crowned Kinglet      | R  | U  | R | F |         |
Mountain Bluebird*        | C  | C  | C |   | F,R     |
Townsend’s Solitaire*     | U  | U  | U |   | F       |
Hermit Thrush*            | U  | U  | U |   | F       |
American Robin*           | A  | A  | A | R |         |
Sage Thrasher*            | R  | U  | R |   | S       |
Water Pipit               | U  | R  | C |   | WM,S    |
Cedar Waxwing             | U  | U  | U |   | F       |
Loggerhead Shrike         | CS |    |   |   | WM,S    |
### SPECIES

<table>
<thead>
<tr>
<th>Species</th>
<th>Sp</th>
<th>Su</th>
<th>F</th>
<th>W</th>
<th>HABITAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Starling*</td>
<td>U</td>
<td>C</td>
<td>U</td>
<td>WM, F</td>
<td>R,</td>
</tr>
<tr>
<td>Solitary Vireo*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Warbling Vireo*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>CS</td>
<td>R</td>
</tr>
<tr>
<td>Orange-crowned Warbler</td>
<td>U</td>
<td>R</td>
<td>R</td>
<td>F, R</td>
<td>F,</td>
</tr>
<tr>
<td>Tennessee Warbler</td>
<td>R</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nashville Warbler</td>
<td>C</td>
<td>C</td>
<td>U</td>
<td>F, R</td>
<td></td>
</tr>
<tr>
<td>Yellow Warbler*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>CS</td>
<td>F</td>
</tr>
<tr>
<td>Yellow-rumped Warbler*</td>
<td>A</td>
<td>C</td>
<td>C</td>
<td>CS</td>
<td></td>
</tr>
<tr>
<td>Townsend’s Warbler*</td>
<td>R</td>
<td>CS</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>MacGillivray’s Warbler*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>CS</td>
<td>F, R</td>
</tr>
<tr>
<td>Common Yellowthroat*</td>
<td>U</td>
<td>C</td>
<td>U</td>
<td>R, WM</td>
<td>T, F, R</td>
</tr>
<tr>
<td>Wilson’s Warbler*</td>
<td>R</td>
<td>C</td>
<td>C</td>
<td></td>
<td>F, R</td>
</tr>
<tr>
<td>Western Tanager*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>WM, S</td>
<td>S, WM</td>
</tr>
<tr>
<td>Green-tailed Towhee*</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Rufous-sided Towhee*</td>
<td>U</td>
<td>C</td>
<td>C</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Chipping Sparrow*</td>
<td>U</td>
<td>C</td>
<td>C</td>
<td></td>
<td>F, S</td>
</tr>
<tr>
<td>Brewer’s Sparrow*</td>
<td>U</td>
<td>U</td>
<td>U</td>
<td></td>
<td>S</td>
</tr>
<tr>
<td>Vesper Sparrow*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>WM, S</td>
<td>S, WM</td>
</tr>
<tr>
<td>Lark Sparrow*</td>
<td>R</td>
<td>C</td>
<td>C</td>
<td>WM, F</td>
<td>WM</td>
</tr>
<tr>
<td>Savannah Sparrow*</td>
<td>A</td>
<td>A</td>
<td>A</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Fox Sparrow*</td>
<td>U</td>
<td>U</td>
<td>C</td>
<td>WM, R</td>
<td>F, WM</td>
</tr>
<tr>
<td>Song Sparrow*</td>
<td>U</td>
<td>C</td>
<td>C</td>
<td>WM, F</td>
<td></td>
</tr>
<tr>
<td>Lincoln’s Sparrow</td>
<td>R</td>
<td>R</td>
<td>F</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Golden-crowned Sparrow</td>
<td>CS</td>
<td></td>
<td></td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>White-crowned Sparrow*</td>
<td>C</td>
<td>R</td>
<td>R</td>
<td>F, R</td>
<td>S</td>
</tr>
<tr>
<td>Dark-eyed Junco*</td>
<td>C</td>
<td>A</td>
<td>C</td>
<td>R</td>
<td>F, S</td>
</tr>
<tr>
<td>Red-winged Blackbird*</td>
<td>C</td>
<td>A</td>
<td>C</td>
<td>WM, T</td>
<td>R</td>
</tr>
<tr>
<td>Western Meadowlark*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>WM, F</td>
<td>R</td>
</tr>
<tr>
<td>Yellow-headed Blackbird*</td>
<td>C</td>
<td>A</td>
<td>C</td>
<td>WM, L</td>
<td>T</td>
</tr>
<tr>
<td>Brewer’s Blackbird*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>WS, F</td>
<td>WM</td>
</tr>
<tr>
<td>Brown-headed Cowbird*</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>F, WM</td>
<td></td>
</tr>
<tr>
<td>Northern Oriole*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Purple Finch</td>
<td>R</td>
<td>CS</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Cassin’s Finch*</td>
<td>C</td>
<td>C</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>House Finch*</td>
<td>R</td>
<td>R</td>
<td>R</td>
<td>S, WM</td>
<td>F</td>
</tr>
<tr>
<td>Red Crossbill*</td>
<td>R</td>
<td>U</td>
<td>C</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>Pine Siskin*</td>
<td>U</td>
<td>C</td>
<td>C</td>
<td>CS</td>
<td>S, WM</td>
</tr>
<tr>
<td>American Goldfinch*</td>
<td>R</td>
<td>R</td>
<td>U</td>
<td>CS</td>
<td></td>
</tr>
<tr>
<td>Evening Grosbeak*</td>
<td>R</td>
<td>U</td>
<td>R</td>
<td></td>
<td>F</td>
</tr>
<tr>
<td>House Sparrow*</td>
<td>U</td>
<td>U</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### COMPARATIVE BIRD OBSERVATIONS FROM STEENS, PUEBLO, TROUT CREEK AND OREGON CANYON MOUNTAINS

David B. Marshall, 4265 S.W. Chesapeake Avenue, Portland, OR 97212

#### INTRODUCTION

Five major mountain ranges are present in the Basin and Range physiographic province of southeastern Oregon. From west to east they are Hart Mountain (HM), Steens Mountain (SM) and the Pueblo Mountains (PM), which have a north-south alignment, and finally the Trout Creek (TCM) and Oregon Canyon (OCM) Mountains. The TCM extend well into Nevada. The OCM are regularly lumped with the TCM in common usage, but U.S.G.S. quadrangles vaguely separate them approximately along the Harney-Malheur County line or between the Willow Creek and Whitehorse Creek drainages.

Unlike most ranges of Southeastern Oregon and Nevada that form long north-south fault blocks, the TCM and OCM tend to extend east and west with most drainages running north and south rather than east and west. The highest of the 5 ranges is SM (9670 feet), and lowest is the OCM (8027 feet). The highest point in the TCM is in Nevada, but in Oregon this range exceeds 8200 feet in elevation. HM reaches 8065 feet and the PM 8634 feet. Elevations of basins between ranges typically run around 4000 feet.

While this paper covers the birds of SM, PM, TCM and OCM, I have covered in the habitat descriptions data on HM as well for comparative purposes. Information on the birds of HM is covered in Voget’s paper in this issue of Oregon Birds and in Mewaldt (1983).

Information on the birds of SM, PM, TCM and OCM has been sparse. Birds of Oregon (Gabrielson & Jewett 1940) contains few specific references to HM and SM and none to the other ranges. To my knowledge, the first specific write-up on the birds of SM is the Ph.D. thesis by Hansen (1956), which contains a briefly annotated list of vertebrates he and others up to that time found on SM. Hansen had access to field notes of Stanley G. Jewett, who collected on SM. Hansen took information from early literature which I did not review. Hansen spent a total of 29 weeks on SM during June.
July, August and early September in 1952, 1953 and 1954. His species accounts provide dates without years.

Steens Mountain is a popular birding area. I did not attempt to go through Audubon Field Notes, American Birds and Oregon Birds for unusual or rare bird observations specifically to SM, but did take note of the paper by Fix (1977) who summarized his ornithological observations on HM and SM. I found it difficult to use this paper. Locations are not noted and the accounts lump SM and HM. I spent many an enjoyable weekend camping on Steens Mountain from 1955 through 1959, but, unfortunately, did not take notes. I am not aware of anything in the literature on the birds of the PM, TCM or OCM except for 1 account of a trip to the PM (Marshall 1981) which did not appear in a publication that would be picked up in ornithological circles.

In contrast to the mountain ranges, the birds of the basins separating these mountains are continually monitored by birders. Reports from Warner, Harney, and Alvord Basins, especially the Malheur National Wildlife Refuge and riparian areas in the vicinity of Fields, regularly appear in Oregon Birds. The scarcity of accounts from the mountains can be attributed to the fact they are not ornithologically as rich as the basins, and they are inaccessible to vehicles much of the year because of snow and poor roads.

This paper provides an account of birds I observed during 22 days in the PM, TCM and OCM along with material extracted from Hansen for SM. Because of a need to separate the ranges from intervening basins and numerous low elevation sagebrush- or sagebrush juniper-covered mountains and tables of southeastern Oregon, I have arbitrarily considered only observations made above 5500 feet elevation. This eliminates a number of valley or basin species which range into the foothills and occur on low-elevation mountains of the region. Collections by Jewett as annotated by Hansen do not always give elevations or locations on SM. I dropped such accounts from consideration in this paper.

PROCEDURE

This paper is based on the literature cited and my own field notes. The latter cover 2 visits to Pueblo Mountains: 21-24 June 1981 and 22-24 June 1982 and 5 trips to the Trout Creek and/or Oregon Canyon Mountains as follows: 1-3 July 1972; 2-5 July 1978; 26-28 June 1985; 18-20 June 1986; and 21 October 1986. All Pueblo Mountain work was done by backpacking a 14-mile stretch of the Desert Trail from Denio Creek to the Roux Place 5 miles south-southeast of Fields. The OCM work was done by backpacking a 14-mile stretch of the Desert Trail from Denio Creek to the Roux Place 5 miles south-southeast of Fields. The OCM and TCM were visited using 4-wheel drive vehicles. Overnights were spent at various campsites in the mountains except for the short 1-day October visit. Both 1986 visits did not take

in the OCM. None of the TCM visits entailed taking identical travel routes, but in general all major roads in these mountains were traveled 1 or more times. Observations were general, not systematic. It should be noted that with the exception of the October trip, all work was done in late June or early July. Early June visits might have yielded more, as breeding activity, vocalizations, and courtship for some species tapers off later even at 6000 feet plus. However access is more difficult earlier because of snow fields, mud and greater chances of inclement weather. Spring and fall work would add species which occur here as migrants.

The TCM were approached from 3 points off the Trout Creek-Whitehorse Ranch County Road that runs generally northeast starting about 9 miles south of Fields and goes to U.S. 95. The 3 points from west to east were the Oreanna Creek Road that is reached by turning south off the Trout Creek Whitehorse road 5 miles out, the Little Fork of Trout Creek Road that turns south about 14 miles out just past the Sherburn Ranch, and the Willow Creek Road that turns off about 23 miles out near the crossing of Willow Creek. All 3 of these roads merge or join with a ridge or crest route which generally runs along the crest of the TCM and OCM. The TCM were also reached from the east via the OCM on 3 of the trips. The eastern access to the OCM is off U.S. 95 north of McDermitt past the Oregon Canyon Ranch and thence north and then south up a steep grade to a high ridge lying west of Oregon Canyon.

The Oreanna-Little Trout routes constitute what is referred to as the Trout Mountains Loop; there are some signs carrying this designation. There are no other road signs. The road names I just gave are descript-
tive but not official. I don't recommend travel here without BLM or U.S.G.S. maps. Most roads require a 4-wheel drive vehicle with good road clearance. Motorized access to the PM is even more limited. The future of the primitive road system in these 3 ranges is unknown pending outcome of several wilderness proposals.

Access to SM is best via the popular Fish Lake road out of Frenchglen which makes a loop from the crest of the mountain, across the head of Little Blitzen Gorge and into Catlow Valley. With care, this road can be handled with passenger cars. Most birding on Steens Mountain in this paper has been along or not far off this route.

For hiking in the PM, I used the Desert Trail Guide - Pueblo Mountains - Oregon published by The Desert Trail Association, P.O. Box 589, Burns, OR 97720. This guide, which consists basically of a topographic map, describes a scenic route for foot travel along the crest of the PM. Campsites along this route from which observations were made included Denio Basin, the head of Van Horn Basin, and a spring located 1 mile west of the McLean Hunting Cabin.

AVIAN HABITATS

The presence or absence of various birds in these ranges is governed by vegetation. There are both similarities in vegetation between the 5 ranges and some major differences. These reflect differences in precipitation, exposure to weather, slopes, soil conditions, grazing practices, geological history and proximity to seed sources. Some of these differences are shown by Table 1. Wyoming big sagebrush (Artemisia tridentata wyomingensis) and grasses, mostly cheatgrass (Bromus lectorum) dominate the lower elevations of all 5 ranges. Quaking aspen (Populus tremuloides)/grass or quaking aspen/mountain big sagebrush (A.t. voseyana) communities occur extensively at mid and high elevations in all 5 ranges along streams, springs and sites that hold snow well into the summer. Aspen stands that are essentially small forests occur particularly in basins at the heads of streams on the west slopes of SM and along the east slope of the PM. The largest in the PM is the Van Horn Basin. Tree age and size varies among stands, but in most there are dead or live trees with sufficient heart rot to enable excavations by woodpeckers.

Other riparian plants include willow (Salix spp.), white alder (Alnus rhombifolia) and chokecherry (Prunus emarginata). Willow is most prevalent around meadows and along streams on HM and SM. Chokecherry grows to full tree size in the Van Horn Basin of the PM. Black cottonwood (Populus trichocarpa) lines streams of some glacial cut gorges on SM.

Meadows surrounded by willows are most prominent on HM and SM where precipitation is obviously greater than in the PM and eastward. Likewise, stock ponds and small reservoirs which are also good avian habitats are more numerous on HM and SM. Streams are largest on SM. In general, plant life is more diverse on Steens Mountain than any of the other 4 ranges.

Dryland vegetation also varies among the 5 ranges, but has similarities. Wyoming sagebrush/grass communities are prominent on the lower slopes of all ranges. Grasses on lower slopes consist principally of cheatgrass, but mature bunchgrasses such as bluebunch wheatgrass (Agropyron spicatum), Idaho fescue (Festuca idahoensis), Sandberg's bluegrass (Poa sandbergii) come in at mid elevations where grazing has not been severe. Squirrel tail (Sitanion hystrix) is also a common grass, especially in the OCM.

Miscellaneous shrubs include several other species of sagebrush which occur on all 5 ranges. Bitterbrush (Purshia tridentata) occurs in solid blocks on HM and snowberry (Symphoricarpos rotundifolia) is especially prominent on high slopes of the PM in good soils. Patches of snowbrush (Ceanothus velutinus) occur on all 5 ranges.

Coniferous trees are present on HM and SM. An isolated stand of ponderosa pine (Pinus ponderosa) is the center of the best birding area on HM, and white fir (Abies concolor) occurs in Fir Canyon on SM. Western juniper (Juniperus occidentalis) is by far the most conspicuous conifer and occurs as woodlands on the west slope of SM at mid elevations and on HM.

While patches of curlleaf mountain mahogany (Cercocarpus ledifolius) occur on ridges in all 5 ranges, stands of this plant are most developed on Mahogany Ridge of the TCM where a forest-like stand covers several square miles. Some of the trees are over 12 inches in diameter. All 5 ranges also have well-drained subalpine slopes above 7000 feet dominated by low-growing plants such as subalpine big sagebrush (A.t. spiciformis), native bunchgrasses and herbaceous species such as lupine (Lupinus sp.) or a low form of rabbitbrush (Chrysothamnus sp.). Often the vegetation on these wind-swept high elevation sites is sparse. All the ranges have cliffs and rocky outcrops.

All 5 ranges have been subjected to heavy livestock grazing, and vegetation has thus been altered. Recent changes in grazing practices are resulting in marked improvement of range and riparian areas on HM, but on the other 4 ranges little escapes the cow. Small grazing exclosures in the TCM and OCM demonstrate considerable differences in vegetation inside and outside exclosures. The fenced area at Jackman Park, SM, has lush ground cover under aspen stands as compared to most aspen stands which are almost devoid of ground cover. The area would be excellent for some
comparative studies of grazing impact on birds, but more and larger exclosures are needed to accomplish this.

### Table 1

*Relative Abundance of Various Habitats on the 5 Principal Mountain Ranges in Oregon's Basin and Range Physiographic Province*

<table>
<thead>
<tr>
<th>HABITAT</th>
<th>HM</th>
<th>SM</th>
<th>PM</th>
<th>OC-TCM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Riparian/Wetland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sedge/Hellebore meadow</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Willow</td>
<td>1</td>
<td>1</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Alder/Chokecherry</td>
<td>2</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aspen/grass &amp; /or Mt. big sagebrush</td>
<td>2</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Streams</td>
<td>2</td>
<td>1</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Water holes &amp; Stock ponds</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Dryland</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wyoming sagebrush/Grass</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Wyoming sagebrush/Juniper/Grass</td>
<td>2</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bitterbrush/Sagebrush</td>
<td>1</td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Snowberry/Mt. big sagebrush</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mt. mahogany/Grass &amp; /or Mt. B. Sagebrush</td>
<td>3</td>
<td>2</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Mt. mahogany/Big sagebrush</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Subalpine big sagebrush/Grass</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Rock outcrops &amp; cliffs</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Snowbrush <em>Ceonothus</em></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
</tr>
</tbody>
</table>

1. Well-developed and readily found
2. Not so common
3. Sparse
4. No number indicates absent

### ACCOUNTS OF BIRDS

Ducks (Subfamily Anatinae). Whereas Hart Mountain has numerous ponds, waterfowl habitat on the 4 more eastern ranges is nearly absent. My only duck observations are for 28 June 1985 at Hollaway Reservoir on the west side of the TCM where I observed a Mallard (*Anas platyrhynchos*) hen with 4 ducklings, a pair of Cinnamon Teal (*A. cyanoptera*) and a Gadwall (*A. strepera*). A pair of Gadwall was also observed at Chicken

Hawks and Eagles (Family Accipitridae). Red-tailed Hawks (*Buteo jamaicensis*) and Golden Eagles (*Aquila chrysaetos*) are both commonly seen in all 4 ranges circling overhead, and Linda Craig reported a Red-tailed Hawk nest at about 5500 ft. in Antelope Canyon in the OCM. Hansen located a nest at 6000 feet in a fir on SM. Northern Harriers (*Circus cyaneus*) are frequently seen along ridges where updrafts occur. Hansen's list also includes the Sharp-shinned Hawk (*Accipiter striatus*), Cooper's Hawk (*A. cooperii*), and Swainson's Hawk (*B. swainsoni*) as occasional; the Northern Goshawk (*A. gentilis*) and Ferruginous Hawk (*B. regalis*) as rare on SM. I would suspect all 5 of these pass over or occur on the other ranges.

Falcons (Family Falconidae). American Kestrels (*Falco sparverius*) are seen nearly every day on all 4 ranges and nest in aspens. Prairie Falcons (*F. mexicanus*) occur much more sparingly, and nest on cliff faces mostly below 5500 feet, but on 23 June 1981 and 22 June 1982 I heard young and saw adults at what was likely an eyrie at about 7000 ft. in the upper reaches of the Willow Creek drainage in the PM.

Spring on the same date. Other than at Hollaway Reservoir, I think of duck use as being in the form of occasional visits.

Vultures (Family Cathartidae). Turkey Vultures (*Cathartes aura*), while conspicuous in basins between the ranges, are, in my experience, not often seen in these mountains; yet Hansen calls the species "common" on Steens Mountain. My notes contain only 1 record: 12 birds in OCM 1 July 1972.

OREGON BIRDS 13(2): 198, 1987

Oregon Canyon Mountains. Photo/T. Steen.
pictus) on SM, but I found them up to 6200 feet at the head of Van Horn Basin in the PM 22 and 23 June 1982 and above Sheepline Spring at 7100 feet on 3 July 1972 in the OCM. Hansen considered the Mountain Quail (Oreortyx pictus) as occasional on SM citing 1 occurrence at 7800 feet on 13 September and a collection by Jewett in the Blitzen Canyon (elevation and site not named) in October of 1936. I have not seen Mountain Quail in any of the 4 ranges and question whether the species still occurs there.

Shorebirds (Order Charadriiformes). Killdeer (Charadrius vociferus) were observed at the various heads of Trout Creek, at reservoirs in the TCM, and OCM and at Fifteenmile Creek. Hansen considered the species as common on SM where the birds also associate with stock ponds. Streams of SM are sufficiently large for Spotted Sandpipers (Actitis macularia) to elevations above 7000 feet. Common Snipe (Gallinago gallinago) occur in meadows above Fish Lake on SM. One was recorded in Denio Basin in the PM 24 June 1982. A Wilson's Phalarope (Phalaropus tricolor) was observed at Hollaway Reservoir, TCM, 28 June 1985 where I would expect them to nest.

Pigeons and doves (Family Columbidae). The only member of the family that occurs here is the Mourning Dove (Zenaida macroura). While Hansen considered it as occasional for SM, my records would indicate otherwise since I observed it nearly every day in the PM, TCM and OCM in pairs or small flocks. A nest with 2 eggs was found 22 June 1982 above Van Horn Creek in PM.

Owls (Family Strigidae). Great Horned Owls (Bubo virginianus) are considered common in aspen groves on SM, and I observed them at 3 sites in the PM but surprisingly did not locate any in the TCM or OCM. I have not observed other species of owls in these mountains, but Hansen listed collections or sight records of the following on SM: Hammulated Owl (Otus), Short-eared Owl (Asio flammeus), Northern Saw-whet Owl (Aegolius acadicus).

Goatsuckers (Family Caprimulgidae). Hansen found the Common Nighthawk (Chordeiles minor) to be common on SM, but I did not record it in the PM or TCM and have only 1 record for OCM which was for 5 individuals at Miracle Reservoir 7 July 1978. Common Poorwills (Phalaenoptilus nuttallii) were heard nearly every night spent in the TCM, OCM and PM. Hansen also considered them common on SM. A nest with 2 eggs was found above Van Horn Basin in PM 23 June 1982.

Swifts (Family Apodidae). Hansen gives a sight record for the Vaux's Swift (Chaetura vauxii) for 27 June, and calls the White-throated Swift (Aeronautes saxatalis) “rare” on SM. It is most often seen along the crest of Steens Mountain, but I have not observed the species in the other ranges.

Hummingbirds (Family Trochilidae). Hansen (1956) refers to “SGJ and INC” [Stanley G. Jewett and Ira N. Gabrielson — Ed.] relative to the Black-chinned Hummingbird (Archilochus alexandri) and Broad-tailed Hummingbird (Selasphorus platycercus) on SM, but his list of references does not contain such a citation. Possibly others have found these 2 species there. I suspect the Calliope Hummingbird (Stellula calliope) breeds in the area, although Hansen's thesis refers to only 1 record, a collection by Jewett at Fish Lake on SM. I observed a female-plumaged bird at the head of Big Trout Creek in the TCM 28 June 1985. The Rufous Hummingbird (Selasphorus rufus) was considered common on SM by Hansen. I agree for SM, but have not found the species as yet in the TCM or OCM where flowers are more sparse. I saw the species only 1 day out of the 7 spent in the PM when 2 or more were seen in the Van Horn Basin 23 June 1982.

Kingfishers (Family Alcedinidae). Hansen considered the Belted Kingfisher (Ceryle alcyon) as “common in August and ranging up to 7400 feet on SM. I did not record it in the other ranges where streams are generally smaller.

Woodpeckers (Family Picidae). Hansen lists the Red-naped Sapsucker (Sphyrapicus nuchalis) as common on SM in aspens, but my notes for PM, TCM and OCM contain references only to old sapsucker holes on aspens despite my being alert for the presence of this species. Neither have I observed Downy Woodpeckers (Picoides pubescens) in aspens in the PM and TCM, a species which appears even more common on SM based on work of Jewett and Hansen. The only woodpecker which is abundant in these ranges is the Northern Flicker (Colaptes auratus) which nests in virtually all large aspen stands in all 4 ranges.

Tyrant Flycatchers (Family Tyrannidae). Notes of the Dusky Flycatcher (Empidonax oberholseri) represent one of the dominant sounds to be heard throughout all 4 ranges, particularly in mountain mahogany. However, the species also associates with juniper and aspen. I have seen nests with eggs in juniper in late June at SM. Hansen also found nests in juniper, as well as in aspen. The status of other members of the genus Empidonax is not nearly so clear. Neither Hansen's thesis or my notes contain references to the Willow Flycatcher (E. traillii), yet I recall this species in the willows at Whorehouse Meadow on SM, and it is abundant in the Blitzen Valley. Fix refers to this species in reference to SM and HM collectively. Gray Flycatchers (E. wrightii) do not appear to be regularly present above 5500 feet. The Hammond's Flycatcher (E. hammondii) does not occur here unless as a migrant. Western Wood-Peewees (Contopus sordidulus) are a common component of the avifauna of aspen groves on SM, yet I found them at only 1 location each in the PM and TCM, Van Horn Basin and near the head of Big Trout Creek respectively. At the latter location a pewee, 1 of 4 or more, was
Warbling Vireo (above) is one of the most common nesting species in aspen in all 4 ranges. Mountain Chickadees nest in aspen in the Oregon Canyon Mountains. Photos/Dan Sherman.

on a nest 28 June 1985. At the O'Conner Homestead in Denio Basin in the PM I observed a pair of Ash-throated Flycatchers (Myiarchus cinerascens) on 21 June 1981.

Larks (Family Alaudidae). The Horned Lark (Eremophila alpestris) is a dominant feature of overgrazed sites and rocky shallow soil areas at high elevations, where it is particularly abundant along roadsides on high elevation exposed ridges in OCM and SM. Such habitat is sparse in the PM, where I found the species only on the ridge above Willow Creek at about 7000 feet.

OREGON BIRDS 13(2): 202, 1987

Swallows (Family Hirundinidae). Like other families, diversity in this one drops off with high elevations. Only the Tree Swallow (Tachycineta bicolor) and Violet-green Swallow (T. thalassina) were found as breeding species above 5500 feet. Both nest in aspen on all 4 ranges. In addition, I found Violet-greens associating with cliffs in a colonial manner in the PM above Willow and Cottonwood Creeks. Barn Swallows (Hirundo rustica) are occasional according to Hansen. I observed 1 pair in Denio Basin.

Corvids (Family Corvidae). The Common Raven (Corvus corax) is frequently encountered on SM, TCM and OCM. It was observed only once in the 6 days in the PM. Black-billed Magpies (Pica pica) are not common on the ranges above 5500 feet and may be visitors there only. Hansen listed the Clark’s Nutcracker (Nucifraga columbiana) as having been seen twice by him on SM.

Titmice (Families Paridae and Aegithalidae). Seven sightings were made of Bushtits (Psaltriparus minimus) at 6 different locations on 5 different days in the PM. They were present as both flocks and pairs. Other than the above, I did not see Bush tits above 5500 feet except for a pair above the head of Little Whitehorse Creek, TCM. Hansen considered the species occasional on SM. I have no explanation for it being more abundant in the PM. Hansen considered the Black-capped Chickadee (Parus atricapillus) as occasional on SM and collected a specimen, but I did not see this species in the area. I observed 1 and possibly 2 Mountain Chickadees (P. gambeli) on Mahogany Ridge in the TCM on 19 and 20 June 1986, and Linda Craig reports finding a nest near Mud Spring, OCM, in mid-June 1984.

Nuthatches (Family Sittidae). Hansen’s thesis mentions a White-breasted Nuthatch (Sitta carolinensis) having been seen by Jewett west of the Alvord Ranch. He also found the Red-breasted Nuthatch (S. canadensis) on SM from 18 June to 29 August, but did not indicate whether this was in the fir forest.

Wrens (Family Troglodytidae). The Rock Wren (Salpinctes obsoletus) could be the second most often heard species over the higher elevations of all 4 ranges. In aspen groves the House Wren (T. aedon) is the most audible species. Nests are numerous. The species is also common in forest-like stands of mountain mahogany in the PM and TCM. In the PM I found a nest of the species in a rock crevice where trees were absent. I heard the unmistakable song of the Canyon Wren (Catherpes mexicanus) above the head of Cottonwood Creek in the PM 24 June 1982, my only record for the area above 5500 feet.

Dippers (Family Cinclidae). Hansen considered the American Dipper (Cinclus mexicanus) as common on SM. I found it only in the upper reaches of Big Trout Creek in the TCM 18 and 19 June 1986.

Thrushes (Subfamily Turdinae). The American Robin (Turdus mi-
gratorius) is common throughout aspen groves in all 4 ranges in June and July and occurs in large flocks in winter with Townsend’s Solitaires (Myadestes townsendi) to feed on the berries of western juniper. The Mountain Bluebird (Sialia currucoides) is a breeding species in virtually every sizable aspen stand. Swainson’s Thrushes (Catharus guttatus) are seldom encountered. Hansen considered them as occasional on SM. I have Swainson’s Thrush records for 29 June 1985 at Jackman Park, SM, and found them locally common in the upper reaches of various forks of Trout Creek where alders and other riparian vegetation are present. I have heard Hermit Thrushes only twice: on 24 June 1982 at the head of Willow Creek, PM, and 2 or more at the head of Oregon Canyon, OCM, on 2 July 1972.

Thrashers (Family Mimidae). Hansen mentions Jewett’s collection of a Northern Mockingbird (Mimus polyglottos) at Fish Lake, SM. The Sage Thrasher (Oreoscoptes montanus) is encountered throughout all sagebrush areas nearly every day.

Pipits (Family Motacillidae). Hansen tells of an early sight record of a Water Pipit (Anthus spinolletta) near the summit of SM in September of 1913.

Waxwings (Family Bombycillidae). Hansen recorded the normally lowland Cedar Waxwing (Bombycilla cedrorum) on 25 July at 7000 on SM.

Vireos (Family Vireonidae). The Warbling Vireo (Vireo gilvus) is conspicuous, by song, from aspen groves on all 4 ranges, and is perhaps second only to the House Wren in that habitat. I found a nest with 4 eggs at about 7200 feet in the OCM on 4 July 1978. Hansen found a nest with 2 eggs on SM at the same elevation on 7 July.

Warblers (Subfamily Parulinae). There appears to be some variation in warbler abundance between the ranges. Hansen considered the Yellow-rumped Warbler (Dendroica coronata) as common on SM, perhaps because of juniper habitat. I did not find the species in the PM, and recorded it only twice in the OCM (in aspens) and once in the TC in mountain mahogany on Mahogany Ridge. The Orange-crowned Warbler (Vermivora celata) is considered common on SM, but I did not locate it in the TC or OCM. My notes show 2 singing males in the Van Horn Basin in the PM on 23 June 1982. I have numerous records for the Yellow Warbler (D. petechia) wherever there are willows in the PM and TCM, and I believe the same situation prevails on SM although Hansen referred to the bird as “occasional.” The MacGillivray’s Warbler (Oporornis tolmiei) is also a common riparian species of SM and the PM, but I recorded only 2 in the TCM and none in the OCM. However, Linda Craig reports finding them as common in Oregon Canyon.

The Black-throated Gray Warbler (D. nigrescens) was reported by Hansen as “occasional” on SM, and by Fix as a “routine” bird of juniper. I ran across the species only twice: once in the mountain mahogany woodland on Mahogany Ridge, and again in mountain mahogany above the head of Little Whitehorse Creek, TCM. Linda Craig’s observations (pers. comm.) in early June in the TCM indicate the species is more common than I found it, and Gilligan and Smith (1980) considered this species to be “fairly common” in mid-June in mahogany and juniper on Mahogany Mountain, Malheur County. Two Townsend’s Warbler (Dendroica townsendi) were collected by Jewett in August of 1936 at Fish Lake, SM. I assume they were migrants.

Birders have speculated on the possibility that the Virginia’s Warbler (Vermivora virginiae) nests in Oregon since they occur in adjoining states, and because of the species’ occurrence in mountain mahogany at City of Rocks, Cassia County, Idaho (Gilligan and Smith, loc. cit.). On 19 June 1986, while birding along the ecotone between Mahogany Ridge and the rocky aspen-covered slopes of Trout Creek Canyon, I detected a song I could not identify. The bird, once located, immediately flew and could not
longer be located. It was warbler size and appeared simply gray against the sky. The song was pitched and timed in the range of a MacGillivray's or Yellow Warbler and consisted of 5 notes which I wrote down as “wee - wee - wee - wee - wee.” The fourth note was held about half the time as the others. The song descended slightly in pitch near the end. This description does not fully match the Colorado recording of this species in the Peterson record series, but comes close if the Colorado bird omitted the last half of its song. The habitat at the site closely resembles photographs I have seen of City of Rocks. I am therefore speculating that the Virginia's Warbler could nest in Oregon, and that this site should be more fully investigated. The subject bird was at the N.W. corner of the N.W. corner of Section 24, T40S, R37E.

Tanagers (Subfamily Thraupinae). The Western Tanager (Piranga ludoviciana) can be considered uncommon. Hansen found them on SM from 17 June to 1 September. I found them in large aspen stands in the PM and TCM on 3 different occasions in mid-June.

Grosbeaks, etc. (Subfamily Cardinalinae). The Black-headed Grosbeak (Pheucticus melanocephalus) has a similar status as the aforementioned, being found in the same habitat at the same frequency. The Lazuli Bunting (Passerina amoena), while not abundant, was regularly encountered in June in brushy areas where stands of chokecherry occur. Such sites occur in the Van Horn Basin, PM, the breaks of Trout Creek below Mahogany Ridge, TCM, and on the slopes of Oregon Canyon, OCM. I have seen this species at Jackman Park on SM and Hansen found a nest 12 July at 7200 feet on SM.

Towhees, sparrows, juncos, etc. (Subfamily Emberizinae). In this large group are many of the most conspicuous or often heard species of the 4 desert ranges. If I were to pick 1 species that typifies the higher reaches of these ranges, it would be the Brewer's Sparrow (Spizella breweri). It is unquestionably the most abundant species in mountain sagebrush, the dominant plant species above 6000 feet. In June the audio-oriented birder becomes aware that the song of this species is heard almost continuously except during the heat of the day. Nests with eggs are commonly found from mid-June to mid-July in sagebrush.

In some areas, particularly in the OCM where there are good stands of squirreltail, the Vesper Sparrow (Poecetes gramineus) is an abundant roadside species. Elsewhere it is less common. Hansen used the word “occasional” again to describe the status of this bird on SM. Two other dominants of this group are the Green-tailed Towhee (Pipilo chlorurus) and the Chipping Sparrow (S. passerina). The former is particularly abundant above 6500 feet in the PM in snowbrush stands, but it is common in shrub stands on all 4 ranges. Nests with eggs are found in mid and late June. The Chipping Sparrow is an abundant associate of mountain mahogany.

OREGON BIRDS 13(2): 207, 1987
(Leucosticte ardoa) along the summit of SM. First found there by Bendire who collected eggs, this species has since been seen there by numerous individuals during the summer. This isolated population should be inventoried. I was alert for Rosy Finches around snow fields on the other 3 ranges but did not find any.

CONCLUSIONS

This paper discusses over 100 species known to occur mostly in summer above 5500 feet on SM and in the PM, TCM and OCM. With the possible exception of some marsh inhabitants associated with Holloway Reservoir in the TCM, and the Mountain Chickadee, which nests in OCM, and Virginia’s Warbler which might nest in the TCM, no species were found in the PM, TCM, or OCM that don’t also occur on SM. Overall the presence of a stand of firs, western junipers, large flat meadows and large streams on SM give this area an edge over the other ranges for birding. The only habitat outside the marsh at Holloway Reservoir that is absent on Steens Mountain but present in the TCM is the extensive stand of mountain mahogany on Mahogany Ridge.

The avian composition of aspen stands and other riparian vegetation, sagebrush areas, and rocky outcrops is virtually the same in all 4 areas except that more species are more abundant on SM (e.g. woodpeckers, Yellow-rumped Warbler, Western Wood-Pewee, hummingbirds and Dark-eyed Junco). The large flat meadows of SM that are absent in the PM, TCM and OCM have the Lincoln’s Sparrow and Red-winged Blackbird. The escarpment at the summit of SM produces White-throated Swifts and Rosy Finches which again were not found in the other ranges. I did not analyze the birds of HM in relation to the other 4 ranges. Because of its water areas and pine stand, I suspect it supports more species than the other 4 ranges. The only one missing for HM might be the Rosy Finch.

On the other hand, the PM may have the highest densities of Brewer’s Sparrows and Green-tailed Towhees. The mountain mahogany stands of PM, TCM and OCM offer opportunities to study populations of Cassin’s Finches that function in the absence of real trees. The OCM probably have the highest population densities of Horned Larks and Vesper Sparrows of the 5 ranges.

Access is much better on HM and SM. Private land is not a major problem to birders there and roads are passable for passenger cars. Permission must be obtained to visit Mahogany Ridge, the area I suggest for further investigation in the TCM. Other than possible Mahogany Ridge specialties, I suggest birding is best on HM and SM.

ACKNOWLEDGEMENTS

I am indebted to Tom and Barbara McAllister for introducing me to the TCM and OCM and Russell Pengelly and others of the Desert Trail Association for guiding me through the PM the first time. Tony Freixas was a companion for the second backpack through the PM.

LITERATURE CITED


EARLY RECORDS OF THE WHITE-FACED IBIS IN OREGON

George A. Jobanek, 2730 Alder, Eugene, OR 97405

The White-faced Ibis (*Plegadis chihi*) is an uncommon summer resident of southeastern Oregon, and presumably was in the 1800s when ornithologists first began to explore the state. Who first recorded the ibis as an Oregon bird, and when, is not easily ascertained, however.

Ira Gabrielson and Stanley Jewett, in *Birds of Oregon* (1940), mentioned a specimen in the U.S. National Museum, labelled as from the "Columbia River Oregon," taken on the "T.R. Peale U.S. Exploring Expedition." They did not regard this as a valid Oregon record because of the ambiguous locality description, but felt that if actually taken in Oregon it most likely would have been collected in the vicinity of Portland.

Titian Ramsay Peale was a naturalist on the United States Exploring Expedition of 1838-1842, commanded by Captain Charles Wilkes. In July 1841, after a 3-year voyage from Norfolk, Virginia, to South America and south Pacific islands, then on to Australia and Antarctica, the expedition reached Fort Nisqually on Puget Sound. From there and Fort Vancouver, the explorers made trips into Oregon and Washington.

John Cassin (1858), in his report on the ornithological findings of the expedition, remarked that specimens of the White-faced Ibis were labelled as having been collected in Oregon, but this again is too ambiguous for a first state record. Cassin used "Oregon" to refer to all of the area encompassed by the Oregon Territory, including today's Oregon and Washington. Furthermore, Cassin noted that Charles Pickering, another expedition naturalist, found the White-faced Ibis at "Vancouver, Oregon." Fort Vancouver was on the Washington side of the Columbia River. Gabrielson and Jewett were justifiably skeptical of the U.S. National Museum specimen being an Oregon bird.

It is possible that neither the specimens Cassin referred to nor the specimen mentioned by Gabrielson and Jewett were collected in North America at all. The White-faced Ibis has a disjunct breeding range, breeding in the western United States and Mexico and in the southern half of South America. Northern birds winter from southern California, coastal Texas and Louisiana, through Mexico, to Guatemala and El Salvador. South American birds winter in the breeding range (AOU 1983; Palmer 1962).

Gabrielson and Jewett (1940) give the first literature record as Coues (1876), whom they cite as having "reported [the White-faced Ibis] as a breeding bird at Camp Harney [near Malheur Lake, Harney County]." This is a misquote of Coues, however. Coues quoted from a letter sent by Charles E. Bendire to E. Dickinson. Writing from Camp Harney, Bendire said that the White-faced Ibis "breeds near here. An officer has sent me portions of a skin, sufficient for identification, and writes me that he saw the young birds, besides some forty old ones." "Near" Camp Harney had become "at" Camp Harney in *Birds of Oregon*.

Did this, though, constitute an Oregon record of the White-faced Ibis? By "near here," that is, near Camp Harney, did Bendire mean Malheur Lake? No, as Bendire himself made clear in his 1877 report on the birds of Oregon.
southeastern Oregon. "I have not actually taken this species in Oregon," he wrote of the White-faced Ibis, "but as it has been found breeding near Quinn River Crossing, Nev., twenty miles from the State line, it is to be presumed that it ranges into this State. Lt. Wood, U.S.A., shot a specimen July 15, 1875, at the above mentioned locality, where he saw some forty of these birds with young still unable to fly." Coues (1876) apparently refers to Wood's Nevada record and is not, then, the first literature record for Oregon.

Unfortunately, the reminiscences of the young man who collected the ibis specimen in question add considerable confusion. Charles Erskine Scott Wood, who after his term of duty as an army officer in Washington and Oregon became a successful Portland lawyer, poet, and political radical, recalled the circumstances of collecting the species nearly 40 years later. He had encountered the species, he remembered, at the OO Ranch near Malheur Lake in the summer of 1875, and had shot the bird as a hat decoration for his fiancee at home in fashionable Washington, D.C. When Bendire saw the skin he was ecstatic, "went crazy over it," proclaimed its rarity, and offered 50 dollars apiece for its eggs.

Later still, in a letter dated 21 July 1934 to President Franklin D. Roosevelt concerning the acquisition by the Federal Government of rancher William Hanley's land in southeastern Oregon, Wood repeated this story. Upon seeing the skin, Bendire went into "rapturous excitement." Bendire said, Wood claimed, that the species was "the bronze ibis, supposed to be absolutely extinct, except an occasional specimen in the Everglades of Florida." Bendire was "going to spare no effort or money to get a collection of these birds and their eggs." Wood said Bendire later donated these to the U.S. National Museum.

C.E.S. Wood's biographer, Edwin R. Bingham (1972), tells a similar story with a different location. Basing his account on Wood's autobiographical notes, Bingham placed Wood at P Ranch, south of Malheur Lake. Again, Bendire supposedly marvelled at the ibis specimen and acquired it from Wood for science.

Who is to be believed? Bendire, in reporting Wood's ibis records from Nevada, wrote less than 2 years after the collection occurred. Wood, though his reminiscences were detailed, did not record his recollections until many years later. Bingham (personal correspondence) agrees with me that Bendire should be trusted over Wood. In addition, there are neither specimens nor eggs from Oregon collected by either Bendire or Wood in the U.S. National Museum (M. Ralph Browning, personal correspondence).

Where does this leave us with regard to the first record of the White-faced Ibis in Oregon? Henry W. Henshaw collected a juvenile male at Warner Lake, Lake Co., on 6 September 1877 (Sharpe & Ogilvie-Grant 1898). In the first unambiguous literature record for Oregon I can find, Henshaw (1880) remarked that the ibis occurs "to the north as far as Southern Oregon, where it breeds." Gabrielson and Jewett (1940) regard Henshaw's specimen as the only definite Oregon record outside of Harney Co. However, Harold C. Bryant saw a White-faced Ibis at Lower Klamath Lake, Klamath Co., on 4 June 1914. A.G. Prill (1922) saw 3 pairs on 1 June 1922 at Crump Lake in the Warner Valley, Lake Co. He collected 3 birds in late May 1931 at Adel in the Warner Valley. Those specimens are now in the University of Oregon Museum of Natural History collection.

After Henshaw, William L. Finley (1908) next reported the White-faced Ibis nesting in Oregon. In 1908, he and Herman T. Bohman discovered a colony of 500 at Malheur Lake. In 1912, L.A. Lewis found 200 adults and several nests on the Malheur N.W.R., Harney Co. (Ryder 1967). Willett (1919) also found 100 pairs at Malheur in 1918, with young flying the last week in July. Ryder (1967) discussed the ibis's subsequent breeding history in Oregon and other western states.

I am indebted to Edwin R. Bingham of the University of Oregon, M. Ralph Browning of the U.S. National Museum, and Janet Hinshaw of the Josselyn Van Tyne Memorial Library, University of Michigan, for their assistance. Owen Schmidt suggested several improvements to the paper.
SITE GUIDE: Trout Creek and Oregon Canyon Mountains

Linda S. Craig, 2433 N.W. Quimby, Portland, OR 97210

The Trout Creek and Oregon Canyon Mountains (most frequently referred to as the Trout Creek Mountains) are a series of east-west trending fault blocks in far southeastern Oregon. Six major streams and their tributaries cut magnificent canyons up to 1000 feet deep.

The Trout Creeks are not very frequently visited because roads are poor, and their distance from population centers is great. Dave Marshall's article in this issue of Oregon Birds is probably the first published data on bird sightings. But the Trout Creeks should tempt birders because the country is gorgeous, habitats are diverse, and Great Basin species, rare in Oregon, probably can be found. June and early fall are the best times to visit.

This Site Guide describes the access routes to the Trout Creeks. Locations mentioned in Marshall's article are noted on the map. For more information, order the Trout Creek and Oregon Canyon planimetric maps (1-inch to the mile scale) from the Bureau of Land Management State Office in Portland.
Access Roads

1. Five miles from the road between Fields, Oregon and Denio, Nevada, this road is marked with a BLM sign, “Trout Mountains Loop.” During good weather, standard passenger vehicles can be driven as far as Holloway Reservoir. Mahogany Ridge is to the northeast.

2. The principal access to the west side of the Trout Creeks is 14 miles from the Fields-Denio road. The road goes about 20 miles to the south and to almost 8000 feet elevation before a steep pitch limits travel to 4-wheel drive. The largest aspen stands are along Big Trout Creek.

3. The road up Willow Creek is not usable by normal vehicles, and good bird habitat is not very accessible. The road is about 23 miles from the Fields-Denio road.

4. From the west, travel past the Whitehorse Ranch to where a power line crosses the road. An unlikely-looking track to the south is the easiest access to the Oregon Canyon Mountains. From Mud Spring, marked by an exclosure and a BLM sign, hike north to aspen and mountain mahogany groves along Antelope Creek and south to a spectacular view of Whitehorse Canyon. The road continues along Oregon Canyon. The densest stands of *Ceanothus velutinus* (snowbrush) are on the east and south rims of the Canyon.

5. Four-wheel drive vehicles can reach Oregon Canyon and Twelve-Mile Creek from the Whitehorse Ranch road or from U.S. 95. Twelve-Mile Creek has some of the Trout Creek’s densest riparian shrubs. Road 5 is about 10 miles from U.S. 95.

Key to the Lettered Features

- a. Calderwood Ranch
- b. Defenbaugh Ranch
- c. Sherburn Ranch
- d. Holloway Reservoir
- e. Red Mountain
- f. Highest point in the Trout Creek Mountains
- g. Chicken Spring
- h. Red-tailed Hawk nest in aspen
- i. Oregon Canyon Ranch (Echave Ranch)
- j. Highest point in Malheur County

*Oregon Birds* 13(2): 216, 1987

Map drawn by Kris Elkin.

*Oregon Birds* 13(2): 217, 1987
FIELDNOTES

Oregon Birds and American Birds have synchronized reporting areas, periods, and deadlines. Field reports for eastern and western Oregon are due to the OB Regional Editor and AB Regional Editor at the same time.

<table>
<thead>
<tr>
<th>Season</th>
<th>Months</th>
<th>Due date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fall</td>
<td>August—November</td>
<td>10 December</td>
</tr>
<tr>
<td>Winter</td>
<td>December—February</td>
<td>10 March</td>
</tr>
<tr>
<td>Spring</td>
<td>March—May</td>
<td>10 June</td>
</tr>
<tr>
<td>Summer</td>
<td>June—July</td>
<td>10 August</td>
</tr>
</tbody>
</table>

A lot was going on this season. Many new late records were set at Malheur and several “vagrant” warblers were also noted. As you will see, I have made a few changes. First, after some location names, I have included a 2-letter code for the county. Also, by popular demand, I am now including observers initials after most sightings. Your comments or suggestions are appreciated. County abbreviations: CR, Crook; DE, Deschutes; HA, Harney; HR, Hood River; JE, Jefferson; KL, Klamath; LA, Lake; WA, Wallowa; and, WS, Wasco. It is obvious that many counties are under-reported.

As usual, a few Common Loons were reported: 2 at Harney Lake, HA on 1 October (GI) and one at Ochoco Lake, CR on 16 October (CS). Pied-billed Grebes were in below normal numbers this fall at Malheur with the last one being seen there on 17 November (CDL), while at Hood River they were in normal numbers (DAA). Pied-bills were noted from 17 November through period’s end at Hatfield Lake, DE (TC). Single Horned Grebes were reported throughout the period at Hatfield Lake after 13 August (CM). One was at Tumalo Res., DE on 15 September (CM). The only reports from Malheur were: 2 at refuge headquarters on 12 October and 1 at Boca Lake on 11 November (CDL). At Hood River, where they are usually the most common small grebe, they were rather scarce this fall with the first being noticed on 14 September (DAA). The only Red-necked Grebe report received was 2 at Wallowa Lake, WA 10 through 17 October (FC). Eared Grebes were down significantly in numbers at Malheur with a maximum of 20 in early October (CDL); at Hatfield Lake they were seen from 17 November through the end of the month (TC). What could have been the first reported Clark’s Grebe from Hood River was seen there on 12 October (DAA, DL, VT). One was on the Klamath River near Topsy, KL (The Chat). The last White Pelicans reported were at Warner Valley, LA (26 on 5 November) and at Malheur (about 25 until 7 November).

Double-crested Cormorants were in higher than normal numbers this season at Hood River with 13 there on 22 November. An American Bittern was on Prairie Cr., WA between Joseph and Enterprise on 5 September (FC). The last one at Malheur was there on 20 September (CDL). A Great Egret was at Sunriver, DE on 10 October (DD). A Green-backed Heron at Fields, HA on 18 September is believed to be about the 5th record from S.E.
Oregon (CM, fide CDL). The last White-faced Ibis this fall were seen on 21 September with 13 at Adel, LA (CM) and 3 at Malheur (CDL). The first Tundra Swans for the season were reported from Wallowa Co. on 27 October, 40-500 were there through the last week of November (FC). 3000 in the Warner Valley, LA on 10 November were the most reported (KV).

Greater White-fronted Geese were done in numbers at Malheur with 12 on 15 October the only ones reported there—except for some near Burns, HA (CDL). At Odell, HR, 1-3 were seen with Canada Geese from 4 October through period's end (DAA). One was at Black Butte Ranch, DE 10 November (MR, fide TC). Even though Snow Geese showed up earlier than usual at Malheur (11 on 1 October) the peak numbers of 400 in early November was lower than normal (CDL). The only Wood Duck at Malheur was a male on 1 August. A Eurasian Wigeon near Odell on 22 November was the only one reported (DAA). One-two males have spent the last several winters there. The first Redheads at Hood River were 4 on 12 October. Numbers rose to 60 by 11 November but were lower than expected and they apparently didn't stay around. Greater Scaup moved through the Columbia River Gorge beginning in mid-October through 22 November. Single inland Oldsquaw were as follows: at Harney Lake on 28 September (CC); at Hatfield Lake on 17 November (TC) and at Prineville Res. CR on 19 November. Hooded Mergansers arrived in the region in early November. Several species of ducks are only casually seen in the Columbia River Gorge, e.g., only one Pintail on 11 November was noted this fall. Two Shovelers on 14 September were the only ones noted in 1986, and Ruddy Ducks were only reported twice: 2 on 4 October with 1 remaining there on 12 October (DAA). A similar situation appears to take place in neighboring Wasco Co. (CC).

The last Turkey Vulture reported was one at Hood River on 14 September (DAA). The last Osprey lingered until 4 October near Cascade Locks, HR (DAA) and at Sunriver on 5 October (DD, fide TC). The first Bald Eagles of the season at Malheur were reported 3 November. Both Sharp-shinned and Cooper's Hawks appeared at Malheur in early September and stayed until 4 November. Three reports of Goshawks were received. Two reports of Red-shouldered Hawks were received: an immature was at Paisley, LA on 25 September (M & EE); and 1 on 27 September near Diamond, HA (DI, DF, Audubon Warbler). The Swainson's Hawk has been declining at Malheur for the past 3 decades, so 32 noted on raptor surveys during August is encouraging. Only 5 Ferruginous Hawks were noted on the same raptor surveys at Malheur this year, the last one remained in the area until 9 November near Princeton, HA (SH, fide CDL). The first Rough-legged Hawk of the season was at Burns on 15 October. This year, however, numbers were below normal there. An adult female Merlin was seen at the Joseph sewage lagoon on 14 September (FC). Few Peregrine Falcons have been reported in recent years from Harney Co. This fall 2 were reported: 1 s.w. of Malheur headquarters on 28 August (PP) and one 4 miles e. of Burns on 19 September (M & SR, fide CDL).

A Chukar near Cline Falls, DE on 12 October is one of the few DE county records (C & EL, fide TC). The number of American Coot peaked at 22,600 at Malheur in early October. In Hood River they arrived in mid-September and by the end of November over 1100 were present on the Columbia River between Cascade Locks and Hood River (DAA). Some Lesser Golden-Plovers (race & numbers?) were reported from Malheur on 28 August. Semipalmated Plovers were reported from Kinny Lake east of Joseph (FC) on 20 September and 5 were west of Malheur headquarters on 19 September. An unusually late concentration of 75 Killdeer was at Boca Lake, Malheur N.W.R. 21 November. Two Lesser Yellowlegs spent all of November with 32 Greater at Klamath Falls (SS); 38 were at Summer Lake, LA 15 August (CM) and one was at Hatfield Lake on 1 September (TC). This year's last Spotted Sandpipers were at Hood River on 14 September (DAA) and at Malheur N.W.R. on 19 September. Only 2 Solitary Sandpipers were reported this season, 1 each on 10 August at Tumalo Res. (TC) and s.w. of Malheur headquarters on 28 August (PP). Marbled Godwits were seen inland this year between 5 August and 28 September. A Ruddy Turnstone 3 miles w. of Malheur headquarters on 6 September is one of the increasing number of records from Malheur since it became Oregon's inland sea. Up to 21 Sanderling were also reported from Malheur area from 16 September through 2 October. The only other report was one at Kinny Lake e. of Joseph on 20 September (FC). The last Western Sandpipers of the season were 5 at Tumalo Res. on 15 September (CM). The last Least Sandpiper report for the fall was one at Hood River on 25 October (DAA). Baird's Sandpipers were reported from Malheur until 26 September. Elsewhere they were at Tumalo Res. (1 on 10 August, TC), 2 at Summer Lake on 30 August (CM), and 3 at Kinny Lake on 20 September (FC). Only 4 reports of Pectoral Sandpipers were received: 1 at Tumalo Res. in breeding plumage on the early date of 16 August (TC); 6 at Kinny Lakes 20 September (FC); 5 s.w. of Malheur headquarters on 26 September; and 1 near Odell on 4 October (DAA) could have been a HR Co. first. Parasitic Jaegers, always a rare find inland, were reported as follows: 1 along the north shore of Harney Lake on 29 August (PP); 2 at Malheur harassing Ring-billed Gulls on 27 September (D1, fide A.W.); and 1 at Wallowa Lake on 14 September stayed around for 10 days feeding on kokanee salmon (FC). Bonaparte's Gulls were noted at Malheur between 8 August and 7 November (CDL) and one at Hood River on 4 October is rare for that locality (DAA). Single Mew Gulls were noted at Tumalo Res. on 10 August (TC) for a first DE Co. record.
and at Klamath Falls on 23 November (SS). At HR, where they are regular, they were a little later than normal with up to 7 being seen after 11 November.

Up to 9 Glaucous-winged Gulls were present along the Columbia River, HR where they are regularly seen (DAA). The 2nd DE Co. Sabine’s Gull was at Wickiup Res. 29 September (CM). Common Tern sightings have increased at Malheur since it increased in size. Six were there on 1 October (GI). An “incredible” number of Black Terns (106) were at Summer Lake 15 August (CM); the last reported this season was at Malheur on 20 September.

Three Common Barn-Owls were at Summer Lake 28 September (CM). A Flammulated Owl was present at Malheur headquarters 27 September through 27 October. A Northern Pygmy-Owl was at Chandler SP 28 September (CM). The last Burrowing Owl at Malheur was 1 on 12 September (TC). A Long-eared Owl in the Spring River area 25 August was one of the few DE Co. records (TC). Two Northern Saw-whet Owls were reported: 1 at Malheur headquarters 27 September (CM) was reportedly scared off by an over-zealous photographer and a juv. on 19 October was sitting on a fence post between Joseph and Enterprise (FC).

Late Common Nighthawks were at Sunriver and Malheur on 2 October but the last report was on 4 October in Bend (TC). The last Vaux’s Swift was at Malheur 25 September.

A female Black-chinned Hummingbird was in Burns on 15 September (MA). A male Anna’s Hummingbird was in Bend’s West Hills throughout Oct. until 1 November (TC) for an all time late date. Malheur’s last Rufous Hummingbird on 21 September was a day earlier than their previous late date, but the last for the region was on 26 September at Ochoco Lake (CS, fide TC).

Lewis’ Woodpeckers moved through central Oregon in good numbers in Sept. Over 12 were at Malheur in mid-Sept.; 3 at Cold Springs CG on 5 September (CM); 2 at Sunriver 11 and 13 September (TC, JM); and 1 was reported eating bugs off tomatos in Bend in early Sept. (CE); 1 was near Parkdale, HR on 25 October (DAA, DL) where they are now only occasional.

Single Red-naped Sapsuckers were at Malheur on 22 September and 10 October. A Red-breasted was at Lost Lake, Santiam Pass on 10 September (TC). A female Williamson’s Sapsucker was at Frenchglen between 14 and 27 September where they are rare. Elsewhere Williamson’s were reported from Wickiup Res., DE; Sisters, DE; Davis Lake; Prineville, CR; and n.w. of Summer Lake, LA between 10 September and 10 October (m.ob.). A Black-backed Woodpecker at the High Desert Museum, DE on 10 October was the only reported (The Chat).

A Western Kingbird at the Calamity Butte L.O. 2 August (MA) was at an unusual location. The last Tree Swallow was at Sunriver 25 November (DD, fide TC), for an all-time late date for DE. Barn Swallows were noted until 16 November at Malheur.

Steller’s Jays moved into the Madras area in November (IH1). A Blue Jay was reported in the Madras area beginning 24 October (IH). Clark’s Nutcrackers out of their normal range were noted at Fields for about a week from 25 September (RS) and at Wyeth, HR — elev. about 180 ft. — in the Columbia River Gorge on 4 October (DAA). A Black-billed Magpie s.e. of Hood River on 12 October was in an area where they are seldom seen (DAA, DL, VT). Two Black-capped Chickadees were along the Silvies River n. of Burns 17 November; up to 5 along the Link River, Klamath Falls throughout November are noteworthy since they are rather scarce there (SS). Mountain Chickadees staged an incursion into the western portion of the region, with above normal numbers being seen in Bend in Nov. (TC), in the Madras area in late Sept. (IH), and in the Hood River area from 12 October through period’s end (DAA, DL, VT).

A Chestnut-backed Chickadee began coming to a feeder in Bend 10 November; soon after 2-5 showed up (RBA, TC). A flock of 10 Bushtits was along the Silvies R., 4 mi. n. of Burns 17 November; 25 were at the Hood River powerhouse 4 October where they are regular (DAA). A White-breasted Nuthatch near Odell on 22 October (DAA, DL) is noteworthy since they are rarely seen in HR Co. Migrant Rock Wrens were at Malheur field station 18 September and at headquarters on 29 September (CDL). A Winter Wren at Malheur on 9 August was a very early fall migrant. They didn’t become regular until 17 September.

Mountain Bluebirds were scarce this season at Malheur with 6 on 17 November the most noted. A Townsend’s Solitaire at Malheur headquarters 16 August set the all time early fall arrival record by 13 days. Hermit Thrush was noted at Malheur only 2 times between 17 September and 19 October. Varied Thrush began moving into the Bend area 21 September (CE, fide TC) and then through Malheur 23 September (TC, A Warbler). Water Pipits moved through the region in mid September. The first confirmed report of Bohemian Waxwings this fall was 172 noted around lower Hood River Valley 22 November (DAA, DL).

Single Red-eyed Vireos were at Malheur on 15 August and 16 September, and 1 on 19 September was eaten by a Kestrel! As usual a number of vagrant warblers showed up at Malheur. And, as usual the fall migration, as is true for California, tended to be a little more exciting than the spring migration. This year’s finds include: a Tennessee at headquarters 28 August (PP); a female Cape May between 13 and 17 September for one of the few state records (m.ob.); a Black-throated Blue on 14 September (fide, TC); Blackburnian on 15 through 18 September was the first stated record (CDL, DP, et al); Blackpolls were there (TC) and at Diamond (DL, DF, fide A Warbler) on 27 September; a Black-and-White was at headquarters
on 13 September; up to 5 American Redstarts were there between 12 and 19 September; an Ovenbird was there 28 September; a Northern Waterthrush was down in Fields 19 and 20 September (CM). An American Redstart at Deep Creek, near Adel 21 September (CM) was the only one reported away from Malheur. The last Yellow Warblers reported were at Malheur on 2 October and at Prineville (CS, fide TC) and Cascade Locks, HR (DAA) on 4 October. The height of the Yellow-rumped Warbler migration appeared to take place in mid-late September. Single Black-throated Gray Warblers were at Malheur headquarters 15 and 21 September where they are uncommon. A Hermit Warbler in Bend’s West Hills 21 September (TC) is a rare sighting for that locale. A Yellow-breasted Chat was at Malheur headquarters 20 through 27 September.

A female Black-headed Grosbeak at Malheur until 25 September eclipsed the previous late date of 7 September. A Lazuli Bunting on 23 September near Frenchglen also eclipsed the previous date of 25 August. A Green-tailed Towhee through the end of Sept. in Bend was also later than usual (TC). Brewer’s Sparrows were also later than usual—one at the Field Station 23 September beat the old date for Malheur of 8 September. Some were also noted in the Joseph area about the same time (FC). A Vesper Sparrow on 23 September at Malheur only tied the late date. Another new late date was set by a Lark Sparrow at Malheur on 19 September, the previous date being 16 September. Fox Sparrows noted in Bend through November were unusual since they normally depart after the first week in November. Large numbers of Lincoln’s Sparrows moved through the Joseph area in late Sept. (FC). Single White-throated Sparrows were noted at Chandler SP on 21 September (CM), at Prineville 26 September (CS, fide TC); and at Sunriver on 31 October (DD, fide TC). An immature Golden-crowned Sparrow at the Calamity Butte L.O. on 19 September was unusually late (MA). Five White-crowned Sparrows at the Field Station 7 November broke the previous late date by a day. Harris’ Sparrows made a showing with one at Malheur headquarters 19 November (GI, BE); 3-4 seen south of The Dalles, WS, on Thanksgiving Day weekend (BW) was an unusual concentration. In a flock of 200-250 Lapland Longspurs 26 November at Klamath N.W.R. a McCown’s Longspur was spotted for the second Klamath Co. record (SS). A Lapland was reported from the north shore of Harney Lake 29 August (PP). Snow Buntings were reported in early November, 5 north of Malheur and 2 at Prineville Res. (RBA 13 Nov. and 27 Nov.)(C&EL). A late Northern Oriole was in the Bend area 14 October (F & WVH, fide TC). Evening Grosbeaks were spotty in the region. In the Madras they were present in large numbers from Sept. in to Nov. (IH) while at Bend there were only a few. The large numbers present in the Mt. Hood area last summer disappeared.

Many thanks to Donna Lusthoff for being the first person to use the new OFO reporting forms!
All observers are asked to pay particular attention to nesting birds this coming spring and summer. What is nesting where, how many young are produced, etc. This information could be extremely valuable in light of plans to spray huge acreages in eastern Oregon and in light of the possible nesting failures in California last year. Care should be taken when observing nesting birds so that you do not become the cause of nesting failure.


How Do You Explain Birding to Your Father-in-Law?

EASY!
Just give him the book that explains the enjoyment, the rules, and the purpose.

A BIRD IN THE BUSH, (160 pages) by Corvallis nature-writer Don Alan Hall salutes the role of bird watchers in the maintenance of a livable earth.

Get an extra copy because you'll enjoy it, too! If your bookstore doesn't have it, send $7.95 for each postpaid copy to Words & Pictures Unlimited, 1257 N.W. Van Buren Avenue, Corvallis, OR 97330

© Words & Pictures Unlimited, Corvallis, OR 97330

OREGON SHOREBIRD FESTIVAL
COOS COUNTY, OREGON

21-23 August 1987

Sponsored by
Cape Arago Audubon Society
In Cooperation With
Oregon Field Ornithologists

Festival Headquarters
Oregon Institute of Marine Biology
University of Oregon
Charleston, Oregon

Registration $10 per person
Pelagic Trip $30 per person
Dormitory at OIMB $25 per night + 3 meals

SEND THIS DATA:
Location
Date
Time of day
Length of beach walked
Number of Sanderlings seen
Your name and address
Band combination:

PAN AMERICAN SHOREBIRD PROJECT
Academy of Natural Sciences
19th and the Parkway
Philadelphia, PA 19103

OREGON BIRDS 13(2): 226, 1987
FIELD NOTES: Western Oregon, Fall 1986

David Fix, HC 60, Box 101, Idleyld Park, OR 97447

Fall 1986 was in most respects a normal season. Waterbirds and waders were seen in typical numbers at traditional spots with only a few exceptions. November closed with only a sprinkling of east-side/northern winter passerines. The expected few storms in late fall weren't strong enough to cause any "blow-ins" of ocean birds, but did create better-than-average birding from shore. Settled weather characterized by persistent northerly winds prevailed with almost no interruption from about 28 September through the following month. I believe this caused passersines of many families to pass southward across W. Oregon with little "pulsing" or damming-up evident among them. As a result, this season's land birding was definitely more predictable from one day to the next than is ordinarily the case.

Western Oregon's active birders effected a very good coverage of the coastal mudflats during much of the period. The degree to which many observers concentrated their efforts on the estuaries and beaches seems, indeed, to have significantly reduced sightings of land birds. Fewer than normal latest-date reports for w. Oregon originated from the coastal areas. Despite the finding of several nic birds, Fall 1986 proved to be perhaps the poorest in this decade for the total showing of vagrant passersines on the Oregon coast (aside from the above-average appearance by Palm Warblers). Searching for good land birds — even concentrations of routine species — during the slow period that should have produced rarities, became an opportunity to mull over which part of California one might enjoy listing warblers in the most.

Only the observers discovering or reporting a noteworthy bird have been cited, with a few exceptions. A few interesting reports for early fall in northwest Oregon may have been inadvertently left out. I apologize for this oversight.


LOONS through TUBENOSES

Southward movement of the 3 regular loon species was noted as occurring from late Oct. through November (HN). Ten Pacific Loons at the s. jetty of the Umpqua R. 9 August (MSa) and 12 at Brookings 1 September (PSh) had probably summered along the coast. Several hundred were seen from the S.J.C.R. 2 November (PM, LW); perhaps associated with this heavy s. movement was the lone Pacific Loon at the F.G.S.P. the same day (VT, m. ob.). Few observers commented on Red-throated Loons. None were reported inland.

Pied-billed Grebes have a protracted breeding season, sometimes still with dependent young well into the fall. Young Pied-bills were seen at Crystal Springs L. in s.e. Portland 18 October (Paul Osburn). The earliest Horned Grebe was at Yaquina Bay 6 September (T&AM). They are rarely seen earlier than this west of the Cascades. Flocks of Red-necked Grebes are seldom reported during fall migration, so the 36 birds counted at Netarts Bay 21 October is of interest (RL). Such concentrations are more often noted on the ocean in winter. Eared Grebes are decidedly uncommon in western Oregon, yet the totals reported from season to season are surprisingly consistent. This season saw at least a dozen birds, which is typical. By a slight margin most of these were along the coast. Few reports mentioned Western Grebes. Single Clark's Grebes were noted at Hood River 12 October (DAn, DL, VT) and at Tillamook Bay 30 October (BO). While it is correct to say that Clark's Grebes are greatly outnumbered by Western Grebes in our area, we still have much to learn about the seasonal distribution of this sibling species. Typical breeding plumaged birds of each species are not hard to identify, but the lines of distinction are blurred considerably in winter. We need to see an identification article dealing with this situation in Oregon Birds.

Only 2 pelagic boat trips were reported this fall. Were there any others? A pelagic trip out of Garibaldi 8 September (TC et al.) found 5 Black-footed Albatrosses, 10 Northern Fulmars, the token South Polar Skua of the fall, 45 Pink-footed Shearwaters, 1 each Sabine's Gull and Pomarine Jaeger, 2 Parasitic Jaegers, 9 Cassin's Auklets, 8 Rhino Auklets, and an amazing 4 Parakeet Auklets (TC). Another excursion from Newport 13 September (MC, SH et al.) encountered only 1 albatross, 50+ Northern Fulmars, 25 each of Pink-footed and Buller's Shearwaters, and 5 Fork-tailed Storm-Petrels. This trip also found 2 Long-tailed Jaegers. Numbers of alcids were normal.

Few locations in the lower 48 states can boast the exciting shore-based late fall pelagic birding to be found on the c. and n. Oregon coast. Again this fall, many birders enjoyed moments of success while scanning the seas from jetties and viewpoints. Northern Fulmars are usually common just offshore during mid- and late fall, though they are chronically under-reported. Two hundred seen from the Siuslaw R. jetties 16 November was not unusual, based upon the pattern of the last few years (CB, AC, SH). Twenty were spotted from the Boiler Bay viewpoint 31 October (PP), and 1 was there 26 November (JE, HN).

Sooty Shearwaters were abundant close to shore along the Clatsop Co. coast in mid-fall. 250,000 were estimated at Cannon Beach 1 September (DF), with a stream of birds visible beyond the surf line from Ecola Point s. to Hug Point. A seasonally microscopic total of 8000 shearwaters around the S.J.C.R. 30 August and 10 September had burgeoned to an estimated 500,000 on 17 September (HN). A beached Short-tailed Shearwater was found at Clatsop Beach 27 August (HN). Those who have yet to spend a few hours inspecting the wrack line at this location, between Gearhart and the S.J.C.R., have missed a great opportunity to gain a different sort of familiarity with the many species and plumages of seabirds which so often remain too far away to study closely in life. Thirty Short-taileds were seen from Cape Meares 31 October, and 2 were at Boiler Bay 5 November (PP). In the course of a 5-hour seawatch at Cape Meares on 31 October, Pickering also saw single
Buller's and Flesh-footed Shearwaters. Each species has been seen only a few times from shore in Oregon.

The only Fork-tailed Storm-Petrels reported from land were 2 at the entrance to Yaquina Bay 8 November (RG, FS), 2 at Boiler Bay 19 November, and 5 there 20 November (PP). A Leach's Storm-Petrel was at Boiler Bay 30 October and 2 were spotted from Cape Meares the next day (PP).

**PELICANIFORMES through HERONS**

Brown Pelicans visited the Oregon coast in high numbers once again. It was thought by some birders that the ratio of juveniles to adults was a bit lower this year than in recent seasons. Heinl remarked that the large concentrations seemed to disperse earlier this year. Nehls felt that a reduction by mid-fall may have been the thought by some birders that the ratio of juveniles to adults was a bit lower this year.

The coastal maximum was 7 at Drift Ck. Meadows near Siletz Bay 17 November (PM, JJ, JG); 1 was at Ankeny N.W.R. 23 November, and 2 flocks totalling an impressive 230 birds overflew Yaquina Bay 27 October (RL). Five species of geese — Canada, White-fronted, and single Snow, Emperor, and Brant — were at Ankeny N.W.R. on 23 November (Fide BB).

Brandt's Cormorants move n. through the state into Washington and British Columbia by the thousands each summer. Large flocks flying in the broad lines and V's characteristic of this species passed Cannon Beach at 150-200 birds/hour 31 August and 1 September (DF). No reports of Double-crested Cormorants were received from any of the Cascade hydropower reservoirs they assemble at following the breeding season. It would be good to get an idea of just how many cormorants actually use these lakes.

Great Egrets pushed n. into Oregon in high numbers during late summer and early fall. This annual post-breeding incursion was, as usual, most noticeable at concentration points in various estuaries. Their n. movement customarily extends *en masse* no farther up the coast than Lincoln County. It is puzzling that this common s. Oregon heron is so comparatively scarce around Tillamook Bay. Counts of 44 egrets in the Umpqua R. estuary at Gardiner 1 August (MSa), and 40 in the Siuslaw R. estuary 31 August and 4 October (DF, SH, PP) were the only significant flocks mentioned. No Snowy Egrets were reported.

Cattle Egrets pushed n. in quantity this fall, in contrast to their virtual no-show in 1985. At least 25 were reported 30 October+. The only eye-opening occurrence was of 8 birds on the w. side of Sauvie I. 29 November (Tom Wold, Brenda Stroud). The coastal maximum was 7 at Drift Ck. Meadows near Siletz Bay 17 November (TB). A surprising number of Black-crowned Night-Herons were seen this past fall. Of interest was a pair of adults and a young bird near the Hwy. 101 bridge across the Rogue R. during the second week of August (Tom Steger). This remains one of the most poorly understood birds in our area. Although the fall reports may be of birds which summered in other areas, it may not be correct to assume that all are. This is an incredibly easy species to overlook. It could be that small breeding colonies, presently unknown, may exist in many of our estuaries.

**SWANS, GEESE, DUCKS**

The few reports of Tundra Swans were of normal numbers at expected locations. A Trumpeter Swan was seen at Fern Ridge Res. 14 November (BO). Greater White-fronted Geese began trickling into the state in late August, with 6 on Sauvie I. 25 August and 22 there 27 August; a flock of 40 flying over Portland 5 September contained a single Cackling Goose (DM). Two flocks, each of 75 birds, overflew Eugene 23 September (SH). In contrast to the past 2 autumns, only a few flocks were detected crossing the s. Cascades, probably owing to decreased observation time. A flock of 40-50 Cacklers flew s.e. over the Diamond Lake sewage ponds 2 November (DF, PU). A single Cackler was with resident domestic geese at Dexter Res., Lane Co., 29 November (DF, SH). Snow Geese were more widely-reported than usual. In addition to the usual scores of birds on favored Sauvie I, 2 were at Nehalem Meadows 9-11 November (PM, JJ, JG); 1 was at Ankeny N.W.R. 23 November, and 2 flocks totalling an impressive 230 birds overflew Yaquina Bay 27 October (RL).

Five species of swans — Canada, White-fronted, and single Snow, Emperor, and Brant — were at Ankeny N.W.R. on 23 November (Fide BB).

Fifteen Redheads at Sally's Bend, Yaquina Bay 8 November were expected (DFa), but singles at the S.J.C.R. 11 October (BO) and the F.G.S.P. 27 October were the only others reported. Away from the few traditional assemblage sites, Redhead is perhaps the scarcest regularly occurring duck in w. Oregon after Oldsquaw. The normal few migrant Greater Scaup were identified away from the coast, with 1 at the F.G.S.P. 2 October and another 3 there 25 November (JE), and 5 at the Sheridan sewage ponds 21 October (JJ). Several dozen were at their regular Cascade foothills wintering site, Dexter Res., 29 November (DF, SH). Four Oldsquaws were along the n. coast in mid-October. Only 2 scoters were seen inland, a Surf at Sheridan sewage ponds 4 October (VT) and a White-winged at Emigrant L., Jackson Co. 7 October (BS). Barrow's Goldeneyes were well-reported from the higher w. Cascades this fall. Seventeen were at Scott L., Linn Co. 28 September, and 25 were counted there 12 October (T&A). Four were at their wintering spot at Detroit Dam by 21 October (TC). A flock of 82 at the Diamond L. sewage ponds 6 October decreased to 30 on 8 October, 25 on 10 October, and 20 by 2 November (DF, PU); the ponds froze soon afterward. Hooded Mergansers are one of the latest ducks to appear in numbers during fall. Forty were in n.e. Portland 13 November (JJ), and 50 were near the F.G.S.P. 23 November (DL, VT). Two Blue-winged Teal at T.R.S. 2 October were the only ones reported (DF).

**DIURNAL RAPTORS**

The autumn passage of Turkey Vultures through w. Oregon was as well-reported as ever this year. Rogue Valley birders coordinated sightings to establish a total of nearly 850 southbound birds between 6 September and 3 October (Fide MM). A peak of 164 was recorded between 3:00 p.m. and 4:30 p.m., just e. of 1-5 in Ashland, 26 September (Ray Skibby). The Willamette Valley and lower Cascade foothills is the major route used by departing birds, although smaller numbers may be detected heading s. practically anywhere in our area.
Late Ospreys were in the North Umpqua R. canyon 4 November (DFi) and near Independence 22 November (Maeve Lofton). Reports of Black-shouldered Kites followed established patterns. One-two were at Nehalem Meadows all fall; 2 were s. of Tillamook 15 November; 1 was at the Portland Airport 6 August (TL); an adult was at Fern Ridge Res. 19 August (SH) and it or another was there 4 October (EE); 11 were in the Rogue Valley during September (fide MM), and 5 were in the lower Coquille Valley 29 November (M&AA). None was reported in the c. Willamette Valley or around Clatsop Spit. The continuing scarcity of this meadow-loving bird in most of the Willamette Valley is understandable when one considers how very little of that area is left unmanaged. Plowed or burned grass-seed fields and the barren expanses constituting federal goose refuges are a poor habitat for most raptors. While on the subject of kites, it should be noted that age classes ought to be discerned whenever possible. Young birds are recognizable by their brown-tinged plumage (sometimes quite streaked on the head and breast), dusky central tail feathers, and dark-edged back and upper-wing coverts.

A number of reports of Rough-legged Hawks were received for September, with 1 in the Willamette Valley as early as 14 September and 5 on 20 September. None of these undetailed reports is believable. Rough-legs ordinarily do not enter the state until about the first week of October. Reports of September Rough-legs should carry details. An albino Red-tail resident s. of Philomath was said to have been at least 14 years old (Eric Forsman). A Red-shouldered Hawk was in the Rogue Valley 17 September (JM). On 25 October, 5 Red-shoulders were noted in s. Curry Co., where it has actually become one of the more common resident raptors: an imm. at the mouth of the Winchuck R., 2 adults at the mouth of the Pistol R., and 2 vocal adults along Oceanview Drive in Harbor (PP). This species was still a strictly marginal Oregon resident/visitor as recently as fifteen years ago, with each sighting being news.

While birding the northwest side of Fern Ridge Res. 2 September, Heinl flushed an imm. Red-shouldered Hawk from one group of trees to another. After a few minutes the bird took to the air again, circling up in a thermal until it was a speck. It then drifted n. a quarter-mile and began rising again in another thermal. It flew rapidly n. until it was ultimately lost to sight. This was perhaps the first time anyone has actually seen a Red-shoulder "migrate" north in Oregon.

Golden Eagles are resident from the s. Willamette Valley (a few) s. through parts of interior s.w. Oregon, yet only 1 report was received, of a single bird at Emigrant L. 28 September (BS). The first Merlin of the fall was in N. Eugene 9 September (JC), with the first coastal birds at Yaquina Bay (PSH) and Tillamook Bay (PP) both 14 September. A Prairie Falcon at Sauvie 1.9 September was very early for the area (AS). One at Agate L. n. of Medford 10 September was less surprising (OSw). Peregrines were as widely-reported as ever. Immatures were seen during August at Tillamook Bay and Bandon. At least 1 bird had returned to last winter's haunts around the Lloyd Building in urban n.e. Portland by mid-November (Dave Faust). The last sighting at the newly-discovered eyrie in the s. Cascades was 10 September (DFi).

An average 4 Northern Goshawks were noted. A seemingly very early migrant was at Tillamook 3 September (JE, HN), an imm. was watched attempting to capture a Violet-green Swallow and a Dipper at T.R.S. 14 September (DFi), and 2 were at Hills Creek Res. near Oakridge 18 October (DSc). Numbers of smaller accipiters appeared normal or slightly below normal, although 1 observer saw 20 of them.

**RALLIDS, SHOREBIRDS**

Sandhill Cranes were reported only several times, but the 800 birds in 6 groups migrating over s.w. Portland 2 November (TL, RS) had to be a stirring sight. Twenty-three overflow Lake Oswego, s. of Portland 6 November (DM). Two hundred fifty lingered at Sauvie I. into December as usual. The only Sora reported was at Plat I Res. near Sutherlin 11 September (MH). A massive flock of 9-10,000 American Coots lingered on the s. end of Diamond L. from mid-October to early November (DFi, PU). It seems this is a fall staging area.

Shorebirding is the activity for many birders in w. Oregon during much of the fall. I apologize for the fact that this summary is based upon the limited reports I received through newsletters and by word-of-mouth. Only several of the active shorebirders sent field notes to the OFO box! Do not count on seeing your hard-earned observations in print if you do not make the effort to get your notes directly to the Field Reports compiler or to the OFO Box (P.O. Box 10373, Eugene 97403).

Lesser Golden-Plovers of one ilk or another were again well-noted this fall. With the strong feeling that 2 species are involved in this complex, birders should familiarize themselves with the criteria separating *Pluvialis dominica dominica* and *fulva*. [The A.O.U. Check-list Committee this winter, once again, refused to split this species.—Ed.] Once a handful of each form have been scrutinized, this is actually a prompt identification. Certainly it is far less complicated than identifying some of the stints. Birds identified as *fulva* were 2 imm. at the S.J.C.R. 10 September, an adult at Bandon 6 September, and an unaged individual there 9 October. Golden-Plovers labelled *dominica* were 3-4 imm. at the S.J.C.R. 6-10 September, and imm. at Florence 2 October, an imm. at Yaquina Bay 4 October, and an unaged bird at Bandon 9 October. A Golden-Plover at the Bill Thackaberry farm near Lebanon 17 November was very late, as was a *fulva* at Drift Creek meadows near Siletz Bay 21 November (PP). At S.J.C.R. on 17 September there were 5 each of *dominica* and *fulva* (TC). It seems likely that a very few Golden-Plovers lingering late in the fall in some years try to overwinter here in Oregon. Three or 4 mid-winter records in the past 10 years suggest this is probably the case.

Snowy Plovers were reported from only 3 locations during the fall. Seven were on Bayocean Spit, Tillamook all period (fide HN), 1 at North Beach, Douglas Co. 2 August was a good locality record (MSa), and 20 were at Bandon 23 October (D. Stotz). Oregon’s first Piping Plover was seen by a few observers on 6 and 8 September (TC, Craig Miller). An inadvertent outfall of untreated sewage caused the open beach at the Bayshore development near Waldport, Lincoln Co., to become a shorebirder’s bonanza during mid-fall. It attracted 45 Semipalmated Plovers 3 October (JC), a good October total. Two were still there 1 November (DL), and another was at Tillamook Bay 12 November (HN). Semipalmates very early during fall passage; 400 each at Tillamook Bay (HN) and at Bayshore (RL), both 6 August, were
Whimbrel, 23 August 1986, Sunset Beach, Clatsop Co. Photo/Jim Johnson.

Common Murre, 2 August 1986, Coos Co. Photo/David Bailey.

Sabine's Gull, immature, Monmouth, September 1986. Photo/Floyd Schrock.
the highest totals noted during the report period.

Peak counts for Lesser Yellowlegs were 75 at the F.G.S.P. 25 September and 50 on Sauvie I. 14 September. One in the Little Nestucca R. estuary, Tillamook Co., 17 November was about as late as they normally occur (TB). Smaller numbers were widely reported. The high count for Whimbrel was 35 at Tillamook Bay 6 August (DL). Long-billed Curlews showed up at the Siletz L. outlet, Lane Co., 21 August (FC, PSh), at Bandon during late August, and at Plat I Res. 29 August - 8 September (DI et al.). The last bird, an imm., furnished a first inland record for Douglas Co.

Aside from up to 30 Marbled Godwits at Bandon during the season (23 August, PSu), little mention was made of this species. It is clear that the primary autumn flight route of godwits must pass a bit to the s. of our coast, as evidenced by the thousands which occur at Humboldt Bay. Twelve Red Knots on the rocks at high tide at Bandon 24 August (PSu) was the season's high count. Elsewhere, only 5-6 birds were reported, with 1 at the Bayshore sewage seep on 1 November being late but not unusually so (DL). A Buff-breasted Sandpiper was on Sauvie I. 26 August (BO, JJ), and 1 was at the Sixes R. mouth 6 September (SH, PP). One visited Bayocean spit in mid-September (JJ, m. ob.).

Semipalmated Sandpiper reports followed the established pattern. The usual few juveniles were seen on mudflats along the n. coast and 4 were in the Willamette Valley. Two thousand Western Sandpipers at Bayocean spit 27 August-17 September was the peak count. One thousand Least Sandpipers there 27 August and 3 September were the highest counts reported (HN). Baird's Sandpipers were in high numbers this year, and they appeared to have lingered longer than usual. This was also the case in Washington and British Columbia this past fall. Normally they become scarce very quickly after September. Two were at Siletz Bay 14 October (JE, HN), and 2 at the Bayshore seep 13 October (JJ) had increased to 3 on 19 October (DL, VT). One near Salem 25 September was a good locality record for Marion Co. (fide BB). Pectoral Sandpipers were in normal numbers. The peak was 100+ on Sauvie I. 14 September (RS). An individual thought possibly to be injured was in the Rogue Valley 26 October (BS).

Sharp-tailed Sandpipers made a strong showing along the West Coast this fall, and Oregon received its share. At least 6 birds were located: at Tillamook Bay 14 September - 5 October (JJ, JG), 1 at the S.J.C.R. 25 September (PP), 2 at the F.G.S.P. 25 September - 11 October (JE, VT), and 2 on Sauvie I. 26 September - 9 October (TSh). How many more must have gone undetected at shorebird concentration spots elsewhere in w. Oregon? Four Stilt Sandpipers were found, with singles at Baskett Slough N.W.R. 13 September (BLu), at the F.G.S.P. 18-19 September (AS, VT), and 2 on Sauvie I. 17 September - 5 October (JG).

Rock Sandpipers are always fun to discover. The earliest one was feeding on the flats with Dunlin at Bayocean spit 26 October (JG). Five were at favored Barview Jetty 4 November+, and 1 was at the north jetty of the Siuslaw R. 16 November (CB, AC, SH). Rock Sandpipers are notoriously hard to pin down in Lane Co., illustrated by the fact that the above bird furnished a first personal county record for one of Lane County's most active birders. In contrast to other years, the only Ruffs found were all at the S.J.C.R., 2-3 birds present 7-23 September (m. ob.). Four hundred Long-billed Dowitchers at Sauvie I. 9 September (HN) was the largest concentration noted. Two hundred were at Tillamook Bay 8-12 November (DL) and the same number at Coon Pt. on Sauvie I. 10 Oct (Aaron Tegerdine) were the largest late-season gatherings. A dowitcher hanging dead by its bill from a powerline near T.R.S. 26 September (PSu) was surely a morbid oddity.

An American Avocet at Plat I Res. near Sutherlin 13 August furnished an overdue first record for Douglas Co. (DI), and was the only one seen on the west side of the mountains this fall.

Few observers mentioned phalaropes. Five Wilson's Phalaropes were at the Nehalem sewage ponds 7-10 September (JC, HN, AS). One hundred fifty Red Phalaropes were at Newport 21 November (TC), at Coos Bay 24 November (Craig Miller), and 150-200 were at the mouth of the Siuslaw R. about the same time (SH). One hundred were at Boiler Bay 21 November (PP). None was seen away from the coast.

Moore noted that the fall shorebird show at the Kirtland Rd. sewage ponds near Medford was disappointing this year. Only 300 birds were there at the peak of migration. These ponds have produced many interesting records in past years. No specific information on this season's gathering was available.

JAEGERS through Terns

Parasitic Jaegers were seen from shore many times on the n. coast this fall. The latest one was at Boiler Bay 5 November (PP), about as late as they are seen. An imm. was found dead on the road at Netarts Bay 26 October during a storm (JC). In normal contrast to the onshore showing by Parasitics, only 3 Pomarine Jaegers were detected from land, singles at the S.J.C.R. 3 and 21 September and 1 off Cape Meares 31 October. One Long-tailed Jaeger was seen from shore this fall, an adult at the S.J.C.R. 29 August (PP).

Five Franklin's Gulls along the n. coast was a surprising number. One was at Nehalem Bay 19 August (JJ, JG), an adult and imm. were on the open beach at Bayocean spit 23 August (DL), 1 was at Yaquina Bay 6 September (T&AM), and an


impressive 52 birds were seen at Boiler Bay 12 December (RL). Three Cassin’s Auklets were seen at Boiler Bay 19 October (David Bates). This is the best place to see this species from land in Oregon. Rhinoceros Auklets were reported in small numbers along the n. coast during late fall. Twenty-five Tufted Puffins were still at Brookings 1 September (PSu), and 15 were on Haystack Rock at Cannon Beach, Clatsop Co., the same day.

Observers on the high seas out of Garibaldi 7 September briefly glimpsed 4 Parakeet Auklets. This was one of very few observations in recent years in Oregon. [The record has been unanimously approved by the Oregon Bird Records Committee. — Ed.] Another Parakeet Auklet was reported from Cape Meares 7 November.

OWLS, CAGEBIRDS

Nineteen October was a good day for Eleanor Pugh, who heard Spotted, Western Screech-, Northern Pygmy-, and Northern Saw-whet Owls in the early morning from her home near Wolf Ck., n. Josephine Co.! Another Spotted Owl was near Hills Creek Res., e. Lane Co., 18 October (DSc). A Short-eared Owl at Basket Slough N.W.R. 11 September (PSu) was the only report received. Seven Northern Pygmy-Owls were recorded during mid-fall in e. Douglas Co. Two unusual September reports of Burrowing Owl were of 1 at 6700’ on Mt. Hood (Christopher Raithel) and 1 on the e. side of Fern Ridge Res. 16-17 September (SH). Another 1 was again found in pasturelands n. of the Eugene Airport in late fall (TM). The Monk Parakeet colony at the Portland Airport was reported to be very active this fall (DAn et al.).

SWIFTS through WOODPECKERS

Fall passage of Vaux’s Swifts was well-reported this year. Evening roost counts mentioned were: Waldo Hall of O.S.U., Corvallis - 1000 birds 14 September, 2000 on 18 September, and 1000 on 30 September, with only 30 on 1 October (A&KC, John Bragg); Stayton, Marion Co., 1500 on 18 September (Bill Haight); chimney at Leslie and High, Salem, 1000 on 28 August (Christy Calen); incinerator stack at old Roseburg Armory, 7-20,000 on 18 September (DFPi); 5000-27 September (D). The madly swirling galaxy of swifts in Roseburg apparently convenes every year, and is something worth travelling many miles to enjoy. Detail on the location and schedule of use of all swift roosts is encouraged.

Fifteen Black Swifts feeding for at least 2 hours at Plat 1 Res. 19 September was one of very few reports for Douglas Co. (DFPi, D), and, based upon submitted reports, was the only sighting in the state this fall.

Later-than-usual Rufous Hummingbirds included an imm. in Ashland 5 October (MM), an imm. in Eugene 11 October (SH), and a bird in Medford 16 October (Margaret Taft). Most unexpected was a male Black-chinned Hummingbird at the Thackaberry farm near Lebanon 1-7 August (BT, B&EE). This species is very rare west of the Cascades. Late Common Nighthawks were over Eugene 20 September (PSu), the Monmouth sewage ponds 21 September (Jon Anderson), and s. of Salem 17 October (David Bates).
Lewis' Woodpeckers away from the upper Rogue Valley oak belt were 1 at Blue L., e. Lane Co., 1 September (FC, PSh); 3-4 for a month beginning 14 September around T.R.S. and reservoir (DFi, MSa); 1 at Patl 1 Res. 19 September (DFi, DI); 1 found dead at Fall Creek, Lane Co. 4 October, and a possible wintering bird at Ankeny N.W.R. 5 November (Jon Anderson). No reports came from the n. Willamette Valley. A Pileated Woodpecker eating pears in an orchard in Portland 16 October (David Merritt) had to be a startling sight!

**FLYCATCHERS**

Eastern Kingbird is a very rare vagrant along our coast, so 2 birds this fall were a surprise: 1 at Bayocean spit 18 August (Calvin Hill) and another at Ecola S.P. 29 August (Hal Weirenga). Western Kingbirds were not to be found in Roseburg, where they nest commonly in and around the city, by 20 August (DFi); 1 was still in Medford 14 September (BS). Tropical Kingbirds, now tenuously established as an almost-annual fall vagrant on the Oregon coast, showed up at the M.S.C. on 15 October (RS), and then 2 birds graced Nehalem Meadows 4-15 November (JE, HN). The latter birds were seen by practically everyone who looked for them.

An Ash-throated Flycatcher in the Rogue Valley 21 September may have been a summering bird (MM), but the one at Newport 20 September clearly was not (DFa, Tony Floyd). Willow Flycatchers were well noted this fall. The latest birds were 2 at Fern Ridge Res. 18 September (SH) and 1 at Heceta Head 2 October (SH, PP). The latest dates for other flycatchers were: Western Flycatcher, Salem, 19 October (BL); Hammond's Flycatcher, T.R.S., 15 September (DFi); Western Wood-Pewee, 2 each at Monmouth sewage ponds (FS, RG) and in Eugene (SH), all 24 September; and Olive-sided Flycatcher, Emigrant L., 28 September (BS).

**SWALLOWS**

Tree Swallows appear to sneak out of our region with scarcely a bird seen actually migrating, or few flocks observed. Twenty at the Nehalem sewage ponds 17 September was the only gathering noted (HN). Violet-green Swallows, conversely, are one of our more spectacular fall migrants. Large flocks were seen in the Lane Co. Coast Range 19 September (TM). A few scattered singles were seen elsewhere during October, which is normal.

Northern Rough-winged Swallows, like Tree Swallows, tend to avoid detection during their fall exodus. Two adults watched migrating s. along the open beach at Cannon Beach at dawn 1 September were interesting (DFi). One was at the Nehalem sewage ponds 10 September (HN), another was at T.R.S. 14 September (MSa), and an adult was on the Willamette R. in Eugene 20 September (DFi) for the latest w. Oregon report. A Cliff Swallow lingered at T.R.S. until 15 September. Nehls mentions a Barn Swallow roost at Dayton, Polk Co. which has been established for years. It is reported to contain as many as half a million swallows! The only Purple Martins were at the Nehalem sewage ponds during early September.

**LARKS through THRUSHES**

A flock of Horned Larks was seen near Banks, Washington Co., 27 October (JE). A Black-billed Magpie near Lemolo L., n.e. Douglas Co., 23 August furnished the first record for the county (Ralph Burt). Clark's Nutcrackers staged a significant irruption into w. Oregon this fall, although small numbers were involved. Five were on Mary's Pk., w. Benton Co., 19 September (DMar), with 2 there 4-7 October (E&EE); 1 fed on scraps of elk meat at the Elk R. fish hatchery about 10 miles n.e. of Port Orford 16 September (Jim Rogers); 2 were at T.R.S. for much of October (DFi); 1 was at St. Paul in the c. Willamette Valley 27 October (L. Clements), and I was s. of Bandon 13 November (Kaye Downey). An American Crow at T.R.S. during September was only the second sighting there in 3 years' coverage of the area.

Mountain Chickadees also paid a lowland visitation, with reports of mostly single birds coming from too many areas to list. Notable records were of a bird in Newport and at least 8 in Eugene. House Wrens at Bayocean spit 13 October (BSh) and near Florence 19 October were interesting outer-coastal migrants. One was also in Ashland 19 October (PSu). A Rock Wren was near Blue River, n.e. Lane Co., 20 October and 13 November (TM). Do these w. Cascades birds migrate, or hang around throughout the year, or what? The pair of Wrentits first found in September 1985 remained on territory at T.R.S. through the period. One seen in a young Douglas-fir plantation at 3200' two miles e. of the R.S. was only the second site discovered for this slowly expanding species in n.e. Douglas Co.

Varied Thrushes began their typical lowland/southward push during mid-September. Hundreds were at Cape Meares S.P. 13 October (BSh). The first Hermit Thrush to be found in the interior lowlands was in Eugene on the slightly early date of 29 August (T&AM). A Swainson's Thrush was banded at Ankeny N.W.R. on the late date of 7 October (John Annear), at a time when few were still around (or detected).

Twelve Western Bluebirds were on Cape Blanco 12 October (PSu). One at T.R.S. 19 October sustained a 3-year pattern of token appearances during mid-October (DFi). Observers in the Rogue Valley noted an influx of migrants/winners during the second half of October also. Mickel feels that bluebirds are increasing in the Coast Range of Lane County. The increase in cutover timberland in the n. Coast Range, largely devoid of European Starlings, may be proving a boon to this species.

**PIPITS through VIREOS**

A Water Pipit at Nehalem Meadows 30 August was about as early as they occur in the lowlands in fall (IG). Two were at Tillamook Bay 1 September (DH, DL) and 1 was at Basket Slough N.W.R. 3 September (BB). No large concentrations were mentioned among the relatively few reports this season, with 50 birds at Emigrant L. 26 October (MM, M. Hipp) being the biggest flock encountered. Pipits made a poor showing in the Cascades of e. Douglas Co. Two still above 5000' along the w. shore of Diamond L. 2 November (DFi, PU) furnished a late date for that area. Northern Shrikes were conspicuous during October and early November as they moved across the state. Numbers appeared typical. The latest Solitary Vireo was on Cape Blanco 12 October (PSu). An obvious southward push of imm. Warbling
Vireos bought about 30 to a small stand of trees at Apple Pt. on Toketee L. 15 September (DFi). Another imm. foraged in low brush at Plat I Res. 19 September, and a single bird near Eugene 21 September (T&AM) was the last one seen.

WARBLERS

There were only several specific reports for Orange-crowned Warbler, one of our most conspicuous fall migrant songbirds! A large movement at T.R.S. began 9 September and lasted for a few days, then was much reduced by 15 September. Hordes of Orange-crowned Warblers were found just e. of the dam at Plat I Res. 19 September, among them about 10 individuals thought to be of the n. form V.c. celata (DFi, DI). Of some 200 seen on a 3-mile walk in Eugene the following day, 12-15 apparently were celata. Eighty to ninety percent on each day looked like immatures. An Orange-crown at Fords Pond w. of Sutherlin 19 October (MSa) was also a representative of one of the “gray-headed” races, which always comprise a minority of our population regardless of season.

The latest Nashville Warblers reported were in Medford 27 September (fide MM), at Yaquina Head 23 October (Kathy Liska), and at a pond 3 miles e. of Canyonville, Douglas Co. 19 November (MA). The latter bird was in potential wintering habitat, and may well have lingered beyond the date of observation. A Tennessee Warbler was well described from Winchester L. at 5000’ in the Lane Co. Cascades 6 August (PSH). Yellow Warblers were quite obvious again this fall, as in 1985. A movement was noted in w. Washington Co. 18 September (DI, AS), and 20-25 were seen in 2 Eugene city parks 20 September (DFi), nearly all of which were plainly imm. One was at Heceta Head 2 October (SH, PP) and another was in Medford 4 October (Rose and Jim Storey). Surprisingly, there were no September coastal reports of Hermit Warbler. The last sighting for e. Douglas Co. was 12 September and for e. Lane Co. 21 September. As expected, an imm. was with the flocks of migrant Black-throated Gray Warblers and Townsend’s Warblers on Skinner’s Butte in Eugene in mid-fall (20-24 September; DFi, SH). Considering that this warbler is one of the most abundant summer birds in w. Oregon, its traditional scarcity as a migrant across the Willamette Valley is difficult to understand.

A few Common Yellowthroats were seen after their main period of southward passage in September. One was at the M.S.C. 19 October (DL, VT), 1 in Medford the next day (BSi), and what may have been the October individual was seen at the M.S.C. 15 November (SH). A greater-than-normal percentage of adults was noted among migrant Yellowthroats around T.R.S. this year (DFi).

A Pine Warbler was well-described from our exciting “little Del Norte” vagrant strip along Oceanview Drive in Harbor, s. Curry Co. 23 October by California-based birder Alan Barron. Surprisingly, the only other truly vagrant warbler discovered along the coast this fall was a Black-and-white at Bayocean spit, Tillamook Bay 17 September (PP). Only 2 Yellow-breasted Chats were reported, which is typical of this early-departing species. One was at Medford 3 September (BSi) and the other at Roseburg 13 September (MSa). The latter bird was approaching the far side of late for w. Oregon.

What became the strongest fall appearance for MacGillivray’s Warbler this writer has yet observed brought noticeable waves of birds through the vicinity of T.R.S. on 15 and 21-22 September. A final bird was seen there 2 October. I suspect the brush-loving species has not suffered from timber harvesting in the Pacific Northwest. Another MacGillivray’s was at Florence 2 October (PP), and 1 was near the n. jetty of the Siuslaw R. 19 October (CB, AC, SH).

Palm Warblers were in good numbers. Three were at the M.S.C. 13-21 October, 2 were near Waldport 13 October (JC), 1 was at the mouth of Big Creek in n. Lane Co. 20 October (PP), 1 was at the mouth of the Winchuck R. 25 October (PP), 1-2 were in Nehalem Meadows 9-23 November (TC, PM, LW), 1 was at Bay City on Tillamook Bay 15 November, and 1 was at the garden plots in Alton Baker Park in Eugene 1 November (DAR, PSh). It was the second inland record for Lane Co., the first being at Jasper S.P. in 1974.

TANAGERS through FINCH-TYPES

Very few reports for Western Tanager were submitted this fall. It was a lackluster season for migrant tanagers around T.R.S. and it seems observers in the valleys felt the same way. One was seen 19 October near Ashland (PSu). Three or 4 Lincoln’s Sparrows were reported this fall in w. Oregon, the first southbound bird reported (SH). At T.R.S., where non-forest songbirds tend to concentrate in certain places and allow easy day-to-day censusing, it was noted that paler interior Lincoln’s Sparrows began appearing 15 September, while darker northwestern birds showed up only after 21 September (DFi). Arrival and peak-of-season for the darker Lincoln’s, perhaps the race referred to as Forbush’s Sparrow by Gabriel and Jewett (Birds of Oregon, 1940) seems to occur an average of about 1 week later than that of the paler birds each year in w. Oregon (pers. obs.).

Irons found a Grasshopper Sparrow at Plat I Res. 9 September. This bird or another was relocated 19 September (DI, DFi). The question of whether this was a migrating bird hatched elsewhere or a lingerer from a local nesting colony begs an answer. The poor weedy open country e. of Plat 1 Dam looks like pretty good breeding habitat. Anyone working that under-birded Douglas Co. hotspot next summer should make the effort to find out.

A male Indigo Bunting discovered in Roseburg 6 August had probably summered in the area (Meredith Jones et al.). It was felt that the Indigo was paired with a female Lazuli Bunting, but no firm evidence of cross-mating was seen. The first White-throated Sparrow of the fall was in Eugene 4 October (PSH), and what may have been the earliest of numerous wintering Harris’ Sparrows was at the F.G.S.P. 25 November (JJ). A Golden-crowned Sparrow at Fern Ridge Res. 12 September (SH) presaged a sizable flock at T.R.S. 15 September. Two exciting local rarities were discovered in Washington Co., an imm. Lark Sparrow at the F.G.S.P. 31 September (JE) and an American Tree Sparrow near Hillsboro 27-28 November (DFi). Vesper Sparrows are not seen regularly during fall migration, and the only report this fall was of an unspecified number at Basket Slough N.W.R. 14 September (Mike Van Ronzelen). A Swamp Sparrow near the n. jetty of the Siuslaw R. 19

OREGON BIRDS 13(2): 244, 1987

October (AC, CB, SH) was one of very few mid-fall migrants of this species yet discovered in Oregon.

Owing to an off-year for Douglas-fir and true fir seed production, Red Crossbills were strictly concentrated along the coast in Sitka Spruce forests. Nesting was reported in mid-fall in Tillamook and Clatsop Cos. (HN). Virtually none was seen between the coastal lowlands and the higher w. Cascades. Lapland Longspurs made a typical showing at their usual select locations along the coast. The earliest was at the Nehalem sewage ponds 10 September (SH, PP). The fascination Bobolinks display for the area about the M.S.C. may want for easy explanation, but nevertheless continues to provide fall records for Lincoln Co. The only one found in w. Oregon this season was there 16 September (BOI). Cassin's Finches did not wander into the lowlands, but a female-plumaged bird at a feeder at T.R.S. 21 October was followed by a sluggish adult male for several days in early November (DFi). The latest Black-headed Grosbeak was at Medford 27 September (BS). A Lesser Goldfinch was a surprise at the M.S.C. 5 October (PP). Another lingered until 8 November at T.R.S. (DFi). Four Rosy Finches were on Mary's Peak 1 November (fide E&EE), keeping alive a remarkable string of consecutive years the species has wintered on this Coast Range summit.

CITED OBSERVERS — David Anderson (DAn), Merle and Anne Archie (MA; M&AM), Dennis Arendt (DAr), Barb Bellin (BB), Tim Bickler (TB), Chris Bond (CB), Jim Carlson (IC), Fred Chancey (FC), Alan Contreras (AC), Tom Crabtree (TC), Angie and Kevin Cromack (A&KC), David Hofmann (DH), Elzy and Elsie Eltzroth (E&EE), Joe Evanich (JE), Darrel Faxon (DFa), David Fix (DFi), Roy Gerig (RG), Jeff Gilligan (JG), Steve Heinl (SH), Matt Hunter (MH), David Irons (DI), Jim Johnson (JJ), Tom Love (TL), Roy Lowe (RL), Bob Lucas (BL), Donna Lusthoff (DL), David Marshall (DM), Tom and Allison Mickel (TM; T&AM), Jeff Miller (JM), Marjorie Moore (MM), Pat Muller (PM), Harry Nehls (HN), Bob O'Brien (BO), Bob Olson (BOI), Phil Pickering (PP), Martha Sawyer (MSa), Floyd Schrock (FS), Don Schrouder (DS), Bill Shelmerdine (BS), Tim Shelmerdine (TS), Paul Sherrell (PS), Andy Silkocks (AS), Richard Smith (RS), Bruce Stewart (BS), Paul Sullivan (PSu), Otis Swisher (OSw), Verda Teale (VT), Pam Udd (PU), Linda Weiland (LW).

Oregon Birds is looking for material in these categories:

News Briefs on things of temporal importance, such as meetings, birding trips, announcements, news items, etc.

Short Notes are shorter communications dealing with the biology of Oregon's birds. Short Notes typically cite no references, or at most a few in parentheses in the text. Author's name and address appear at the end of the text.

Articles are longer contributions dealing with the biology of Oregon's birds. Articles cite references (if any) at the end of the text. Author's name and address appear at the beginning of the text.

Bird Finding Guides “where to find a _____ in Oregon” (for some of the rarer birds) and “where to find birds in the ______ area” (for some of the better spots).

Reviews for published material on Oregon birds or of interest to Oregon birders.

Photographs of birds, especially photos taken recently in Oregon. Please submit color slide duplicates or black and white glossies in 3 x 5 size. Label all photos with photographer's name and address, bird identification, date and place the photo was taken. Photos cannot be returned unless prior arrangements are made with the Editor.

Deadline for the next issue of Oregon Birds—Volume 13 Number 3—is 1 August 1987. The next issue should get to you by the first week of September 1987. Material can be submitted at any time, and the sooner the better. Please send materials directly to the Editor, 3007 N.E. 32nd Avenue, Portland, OR 97212 (503)282-9403