

REPORT:

**PROCEEDINGS OF THE CONFERENCE ON RAPTOR CONSERVATION
TECHNIQUES, FORT COLLINS, COLORADO, 22-24 MARCH, 1973**

Part 1. INTRODUCTION

by Byron E. Harrell

The Raptor Research Foundation along with the Department of Fishery and Wildlife Biology of Colorado State University and the Colorado Division of Wildlife sponsored the conference held at the Student Center on the University campus. Dr. Richard R. Olendorff organized the program and Dr. Gustav Swanson was in charge of local arrangements. The Colorado Division of Wildlife hosted a social hour. The following served as chairmen of the various sessions: Leslie Brown, Tom J. Cade, James H. Enderson, Richard R. Fyfe, David Graham, Frederick H. Hamerstrom, Jr., Pershing B. Hofslund, Joseph R. Murphy, Richard R. Olendorff, Gustav Swanson, and Clayton M. White. A booklet including the program and abstracts of the papers presented was provided to participants.

The proceedings of the conference are being published in separate parts. The abstracts of papers not printed and edited informal discussion are included.

The parts include:

1. Introduction, *Raptor Research* 7(2):55-61, 1973.
2. Raptor Ecology Sessions, *Raptor Research* 7(2):25-54, 62-69, 1973.
3. Management of Raptors, *Raptor Research Report*, No. 2, in press.
4. Raptor Research Techniques, *Raptor Research* 7(3/4):in press.
5. Rehabilitation and Pathology, *Raptor Research* 8(1):in press.
6. Population Status of Raptors, *Raptor Research Report*, No. 3, in press.

In the following list of papers on the program an asterisk (*) indicates the author presenting the paper.

Thursday Morning, March 22—Raptor Ecology

1. Is heart rate a good measure of the energy metabolism of the semi-free-living Kestrel? James A. Gessaman.
2. The energetics of size dimorphism. J. A. Mosher.
3. Differential habitat use by sexes of American Kestrels wintering in northern California. James R. Koplin.
4. Habitat and time utilization of nesting Sharp-shinned Hawks—a telemetry study. Joseph B. Platt.
5. Post-fledging activity of Red-tailed Hawks. Sara Jane Johnson.
6. Predatory efficiency of American Kestrels wintering in northwestern California. Michael W. Collopy.
7. Foraging behavior of Ospreys in northwestern California. Meyer L. Ueoka.

Thursday Afternoon, March 22—Raptor Populations—1

8. Population status of certain African raptors. Leslie H. Brown.
9. A study of nesting habits and reproductive success of Goshawks in Interior Alaska. Jerry D. McGowan.
10. Current status of the Peregrine Falcon in North America. Tom J. Cade.
11. Population status of the Peregrine Falcon in the Rocky Mountain States. James H. Enderson.
12. The Peregrine Falcon decline in California. III. The contributing causes. R. W. Risebrough, S. G. Herman*, M. N. Kirven, May Davey and Vernon Davey [paper not presented].
13. Changes in the Peregrine population at Langara Island, B.C. R. Wayne Nelson.
14. Status of Peregrines on Amchitka Island with remarks on the west-central Aleutians in general. Clayton M. White.
15. Summary of the west Greenland Peregrine Falcon survey—1972. William G. Mattox and William Burnham*.
16. Autumn emigrations of Peregrine Falcons on Assateague Island, 1970-72. Robert B. Berry and F. Prescott Ward.
17. South Padre Island: Recent years. Ralph R. Rogers* and W. Grainger Hunt.
18. Population status of Gyrfalcons in Alaska. L. G. Swartz*, W. D. Walker, D. G. Roseneau and A. M. Springer.

Thursday Evening, March 22—Raptor Populations—2

19. Population status of the Mississippi Kite. Babette F. Cranson.
20. Populations of the Mississippi Kite in the Great Plains. James W. Parker.
21. Reproductive success of Red-tailed Hawks in the Gallatin Valley, Montana. Sara Jane Johnson.
22. Population trends and breeding success of raptors in northeastern Ohio. David Howard and Roger Thacker*.

Thursday Evening, March 22—Rehabilitation and Pathology

23. Current work on raptor diseases in Kenya, East Africa. J. E. Cooper [read by David Graham].
24. Rehabilitation and release of injured and orphaned predatory birds. James Wisecarver.
25. Raptor rehabilitation. Roger Thacker.
26. Raptor rehabilitation and conservation in Minnesota. Mark R. Fuller*, Patrick T. Redig* and Gary E. Duck.
27. A rapid-acting injectable anesthetic for raptors. J. E. Cooper and Laurence Frank*.
28. A report on the use of a pectoral muscle biopsy in the field for organochlorine analysis. Laurence Frank* and J. E. Cooper.



Conference photos. Upper left, a portion of the audience. Upper right, Richard W. Fyfe. Lower right, Leslie Brown. Lower left, Tom Cade.

29. A Discussion of current pathological findings relevant to raptorial birds. David Graham.

Friday Morning, March 23—Raptor Populations—3

30. Populations and toxic chemical residues in western Canadian Prairie Falcons and Merlins. Richard W. Fyfe.
31. Nesting density and reproductive success of Prairie Falcons in southwestern Idaho. Verland T. Ogden.
32. Population status of five species of large raptors in northeastern Colorado. Richard R. Olendorff.
33. Population status of the Ferruginous Hawk in southeastern Idaho and northern Utah. Leon R. Powers*, Richard Howard, and Charles H. Trost.
34. The problems of Golden Eagles in the West. Walter R. Spofford [abstract presented by Leslie Brown with additional introductory comments].
35. Trends of Golden Eagle numbers in the western United States. Leo G. Heugly.
36. Status of a nesting Golden Eagle population in central Utah. Joseph R. Murphy.
37. Effects of organochlorines and mercury on southwestern Idaho Golden Eagles. Michael N. Kochert.

Friday Afternoon, March 23—Raptor Populations—4

38. The eagle survey in Wyoming. L. Warren Higby.
39. Golden Eagle-domestic sheep interaction in Utah. Leo G. Heugly.
40. Patterns of Bald Eagle productivity in northwestern Ontario, 1966-72. James W. Grier [read by Tom J. Cade].
41. A population study of Saskatchewan and Manitoba Bald Eagles. D. W. A. Whitfield, Jon M. Gerrard*, W. J. Maher and D. W. Davis.
42. Biology of Bald Eagles on Amchitka Island, Alaska. Steve K. Sherrod* and Clayton M. White.
43. Population status of the Osprey in northern Idaho and northeastern Washington—1972. Wayne E. Melquist* and Donald R. Johnson.
44. Effects of organochlorines on the American Kestrel. Jeffrey L. Lincer [paper not presented].
- 44a. Spatial and temporal relationships between Red-tailed Hawks and Great Horned Owls. Thomas C. Dunstan.

Friday Afternoon, March 23—Laws, Conservation and Total Protection

45. The law and North American raptors. Frank M. Bond.
46. The harvesting factor. J. Richard Hilton [read by Dave Siddon].
47. Conservation of birds of prey. Walter R. Spofford [paper not presented].

Friday Evening, March 23—Raptor Management—1

48. Artificial nesting platforms for Ospreys in Michigan. Sergej Postupalsky* and Stephen M. Stackpole [includes “Osprey”, a movie produced by Conservation for Survival, Inc., 55 South Deeplands Dr., Grosse Pointe Shores, Michigan 48236, showing work done with Ospreys in Michigan, including the artificial platform project].
49. The problem of electrocution of eagles on powerlines. Morlan Nelson [includes a movie showing problems with powerlines in the west and natural history-type documentary on the Golden Eagle].

Saturday Morning, March 24—Raptor Management—2

50. An introduction to the concept of raptor management. Frances Hamerstrom.
51. Data requirements for raptor management programs. Leslie H. Brown.
52. Raptor management in Canada. Richard W. Fyfe.
53. A plan for managing the survival of the Peregrine Falcon in the 1970's. Tom J. Cade.
54. The potential for management of raptor populations in western grasslands. Richard R. Olendorff.
55. An approach to improve raptor management in Colorado. Gerald Craig.
56. Raptor management techniques in southeastern Colorado. William C. Andersen.
57. Conservation and management applications of biotelemetry studies from Cedar Creek Natural History Area. Mark R. Fuller*, J. R. Tester and T. H. Nicholls.

Saturday Afternoon, March 24—Raptor Management—3

58. The Bureau of Land Management and raptor management in Idaho. Michael N. Kochert.
59. The Snake River Birds of Prey Natural Area. Verland T. Ogden.
60. Powerline standards to reduce raptor losses on the Natural Resource Lands. John Crawford, A. Dunkeson, and Larry A. Dunkeson.
61. The BLM Habitat Management Technical Note Series for Endangered Species. Carol Snow.
62. Osprey management on the Lassen National Forest, California. David P. Garber*, J. R. Koplín and J. R. Kahl.
63. A National Park Service study of reintroduction techniques applicable to Golden Eagles. Steven B. Layman.
64. Suggested future research toward effective raptor management. Richard R. Olendorff* and John W. Stoddart, Jr.

Saturday Evening, March 24—Raptor Research Techniques

65. Field techniques in a study of the behavior of Peregrine Falcons. R. Wayne Nelson.
66. Advantages and disadvantages in the use of rotary-winged aircraft for raptor research. Clayton M. White* and Steve K. Sherrod.
67. Time-lapse photography: Its usefulness in studying nesting raptors. James H. Enderson.
68. Application of radio-telemetric techniques to studies of strigiform and falconiform birds. Thomas C. Dunstan.
69. An automated radio tracking system for biotelemetry. Mark R. Fuller* and John R. Tester.
70. A telemetering egg for use in studies of incubation and nesting behavior. David H. Ellis.
71. Evaluation of a vinyl wing marker for raptors. Michael N. Kochert.
72. A color-marking technique for permanently dyeing raptor feathers. Cathy H. Ellis.
73. Studies of reproductive success in raptors: Some problems with criteria and terminology. Sergej Postupalsky.

In addition to the formal program there were several special topic informal meetings:

1. Accipiter workers' discussion; Joseph B. Platt in charge (March 22).
2. Raptor disease discussion; David Graham in charge (March 24).
3. Rehabilitation discussion (March 24).
4. Telemetry equipment demonstration; arranged by RRF Bio-telemetry Committee (March 24).
5. Federal raptor regulations; questions answered by Alan Studholme (March 24).

Unscheduled motion pictures included some on Peregrine behavior by Richard W. Fyfe and on nesting of Great Gray Owl by R. D. Muir.

Persons in attendance are listed below according to state or country.

Kenya: Barbara Brown, Leslie Brown.

Canada: David M. Bird, Richard Fyfe, David Hughes, Paul Lague, R. D. Muir, R. Wayne Nelson, Mrs. R. W. Nelson.

Alaska: Jerry D. McGowan, L. Gerald Swartz.

California: David R. Brinkley, Robert Coleman, Michael Collopy, Jim B. Cramer, Fidele de la Torre, Laurence Frank, David P. Garber, Jim Henrikson, Lee Henrikson, James Koplín, Hans J. Peeters, J. David Siddon, Judy Siddon, Meyer L. Ueoka, Jim Wisecarver.

Colorado: William C. Andersen, Paul H. Baldwin, Harold Boeker, Robert F. Buttery, Gerald R. Craig, Babette F. Cranson, John Crawford, Philip Creighton, Lawrence Crowley, James H. Enderson, Marilyn Ernest, Truman Fergin, Kenneth Feller, Robert B. Finley, Jr., John W. Flavin, Michael L. Furcollow, Charles Gibson, Sally Goddard, Giles Greenfield, Alan Harmata, Bill

Hobaugh, Dan Johnson, David Kirkland, C. Eugene Knoder, Rick Krasa, John McPartlin, Ken Mesch, David T. Moran, Carol Snow, John Squires, Mary H. Squires, Robert D. Squires, Jack Stoddart, Gustav Swanson, Robert K. Turner, Dale Wills, Bruce R. Wolhuter.

Florida: Thomas L. Richards.

Idaho: Tracy Fleming, Donald R. Johnson, Michael Kochert, Wayne E. Melquist, Morlan Nelson, Verland Ogden, Mrs. V. Ogden, Roger Olson, Leon R. Powers, Frank B. Renn, Charles H. Schwartz, Charles Trost.

Illinois: Tom Dunstan, Maria Dunstan, Richard J. Peirson.

Iowa: David L. Graham.

Kansas: Richard H. Barnes, Tom A. Buchanan, Ernest Nickens, James W. Parker.

Maryland: Donald A. Spencer.

Michigan: Stanley A. Marcus.

Minnesota: Mark Roy Fuller, Jon Gerrard, Nikki Higgins, Pershing Hofslund, Patrick Redig.

Missouri: Jeffrey C. Peters, Judith M. Southern.

Montana: John Baglien, Derek Craighead, Catherine Ellis, David Ellis, Joel Gustafson, Peter Jenny, Sara Jane Johnson, Bob Macdonald, John Mortenson, Bruce Nelson, Tom Nelson, Jon Swenson, Vincent Yannone.

Nebraska: Dale Becker, Jim Hurt, Ross Lock, William C. Russell.

New Jersey: Ed Henckel, Anita Maehlum, Carl Moritz, Teddy Schubert.

New Mexico: Frank M. Bond, Philip L. Shultz, James Stuart.

New York: Tom J. Cade, Bruce Hamilton, David Zimmerman.

Ohio: Jim Keener, Roger Thacker, James W. Wolfe.

Oklahoma: Mike Brewer, Frank M. Enhard.

Oregon: Ralph Anderson, 15 members of Portland Zoological Society.

Pennsylvania: Robert B. Berry, Rodney C. Gehrlein.

South Dakota: Leonard J. Bingham, John D. Forester, Wallace Russ Gorrell, Byron E. Harrell, Joyce Harrell, Gervaise Hittle, Donald V. Hunter, Dan O'Brien, B. J. Rose, Susan Sindt.

Texas: W. G. Hunt, Ralph R. Rogers, John C. Smith.

Utah: Alan Beske, Bill Burnham, Mayo W. Call, Steven R. Chindgren, Donald G. Donahoo, James A. Gessaman, Steve Hennessy, Leo G. Heugly, Rich Howard, M. Alan Jenkins, John Kimball, Donald P. Kyker, Jr., Carl D. Marti, James A. Mosher, Joseph R. Murphy, Don Paul, Joseph Platt, Gerald L. Richards, Scott W. Sawby, Steve Sherrod, Earl Sparks, Philip Wagner, Clayton M. White, Neil D. Woofinden.

Virginia: Stephen B. Freligh, Timothy A. McGreer, Brian Millsap, Allan Studholme.

Washington: Richard E. Fitzner, Kathy Layman, Stephan Layman, Richard R. Olendorff.

Wisconsin: Rodney N. Crouse, David Evans, David C. Frede, Frances Hamerstrom, Frederick Hamerstrom, E. Janiece Jensen, Sergej Postupalsky, Greg Septon, Charles Sindelar.

Wyoming: L. Warren Higby, Paul Jersky.