#### **CURRICULUM VITAE**

#### JAMES W. GRIER

February 2020

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PERSONAL DATA:

Born: 15 September 1943 Place of Birth: Waterloo, Iowa

Married, 2 children, 3 grandchildren

**DEGREES HELD:** 

B.A. 1965 University of Northern Iowa, Cedar Falls, Iowa

Science (Biology) and Education

M.S. 1968 University of Wisconsin, Madison, Wisconsin

Zoology

Ph.D. 1975 Cornell University, Ithaca, New York

Ecology and Evolutionary Biology, Physiology

PROFESSIONAL POSITIONS:

NDSU: 1973 Assistant Professor of Zoology

1978 Associate Professor of Zoology (early tenure and promotion)

1983 Professor of Zoology (early promotion)2007 Emeritus Professor (retired October 2006)

#### **TEACHING**

Summary: Wide variety of university courses in zoology/biology, including general zoology, anatomy and physiology, comparative morphology, embryology, wildlife ecology, animal behavior, plus those listed below, since 1962, while undergraduate (UNI) and graduate (U of Wis - Madison) teaching assistant, and during career at NDSU. Also assisted in other courses including general botany (UNI), astronomy (NDSU), and bioelectric engineering (NDSU, post-retirement). Taught an estimated more than 10,000 students in courses. Prior to retirement: advised an average of 30-35 undergraduate students per year, was major advisor for 32 M.S. and Ph.D. students, and was also on numerous other graduate committees, avg. 5-10/yr. The 32 students that he served as major advisor went on to major positions in research, teaching, and administration in academia, state and national government agencies, and various organizations. After retirement: co-advised-completed 1 M.S. student (in bioelectric engineering) and 2 Ph.D. students (in CMB and Zool.), assisted with grad programs in HNES (Health, Nutrition, and Exercise Science) and is currently (as of Feb. 2020) working with other grad students (both M.S. and Ph.D.) in biological sciences and education.

### Courses most recently taught

Biology 151 L -- Labs (replaced: General Zoology, Zool 170, 171 [courses last taught 2001] since 1974) Herpetology (Zool 454/654) fall (odd years, last taught 2003) since 1980's Animal Population Dynamics (Biol 776) spring (odd years -- last taught 2005) since 1973 Biological Research Principles (Biol 784) fall (as of 2004, when last taught), annually since 1973

#### UNDERGRADUATE ADVISING

1973-2006 advised an average of 30-35 students per year 2000-2006 advised one or more Capstone Seminar undergraduate (Biol 491) groups each semester

## **GRADUATE THESES/DISSERTATIONS DIRECTED**: 32 total, M.S. and Ph.D., as major advisor; also on numerous other graduate committees, avg. 5-10/yr

#### **PROFESSIONAL AFFILIATIONS** several including:

Prior to retirement: American Association for the Advancement of Science (AAAS), Sigma Xi, The Wildlife Society, American Ornithologists' Union, Wilson Society (ornithology), Raptor Research Foundation, Herpetologists' League, The Paleontological Society, and others. After retirement: AAAS.

#### PUBLICATIONS: -- Peer-reviewed / refereed

- An inexpensive apparatus for time-lapse photography. American Biology Teacher 26:198-201. (with R. C. Goss).
- 1968 Immature bald eagle with an abnormal beak. Bird Banding 39:58-59.
- Bald eagle behavior and productivity responses to climbing to nests. Jour. Wildl. Manage. 33:961-966.
- 1970 Peregrine Survey on southern Baffin Island. Canadian Field-Naturalist 84:242-243. (with J. D. Weaver)
- 1971 Pre-attack posture of the red-tailed hawk. Wilson Bull. 83:115-123.
- 1973 Techniques and results of artificial insemination with golden eagles. Raptor Research 7:1-12.
- 1974 Reproduction, organochlorines, and mercury in northwestern Ontario Bald Eagles. Canadian Field-Naturalist 88:469-475.
- 1975 Patterns of bald eagle productivity in northwestern Ontario 1966-72. Raptor Research Report No. 3:103-108.
- 1976 PCB's in bald eagles. Science 191:1292.
- 1977 Reproduction and toxicants in Lake of the Woods Ospreys. (with C. R. Sindelar and D. L. Evans). Proc. of No. Am. Res. Conf. on Ospreys pp. 181-192.
- Eggshell thickness and pollutant relationships among North American Ospreys. (with P. R. Spitzer, R. W. Risebrough, and C. R. Sindelar) Proc. of No. Am. Res. Conf. on Ospreys pp. 13-19.
- 1977 Quadrat sampling of a nesting population of bald eagles. Jour. Wildl. Manage. 41:438-443.
- 1979 Caution on using productivity or age ratios alone for population inferences. Raptor Research 13(1):20-24.
- 1980 Great blue heron colonies in northwestern Ontario. Canadian Field-Naturalist 94:182-184. (with P. Gray, G. Hamilton, and P. Edwards)
- 1980 Modeling approaches to bald eagle population dynamics. Wildlife Soc. Bull. 8(4):316-322.
- Aerial-visibility bias and survey techniques for nesting bald eagles in NW Ontario. Jour. Wildl. Manage. 45:83-92. (with J. Gerrard, G. Hamilton, and P. Gray)
- Bald eagle census methods. In Handbook of Census Methods for Terrestrial Vertebrates. CRC Press. pp. 48-49.
- Ban of DDT and subsequent recovery of reproduction in bald eagles. Science 218:1232-1235. (cover article, with cover photo for that issue)
- Directed relocation of a golden eagle nest site. J. Wildl. Manage. 46(4):1982. (with H. Postovit and J. Tate).
- 1983 Trends in bald eagle reproduction and toxicants in northwestern Ontario, Canada, 966-81 (Abstr.). In Biology and Management of Bald Eagles and Ospreys, page 319.
- The bald eagle in the northern United States. Bird Conservation 1:41-66. (with J. B. Elder, F. J. Gramlich, N. F. Green, J. Kussman, J. E. Mathisen, and J. P. Mattsson).
- Northern States Bald Eagle Recovery Plan. U.S. Fish and Wildlife Service Publ. 76 pages plus appendices. (with coauthors as above article).
- 1984 Biology of Animal Behavior. Times Mirror/Mosby College Publ., 693 pages, 866 illus.
- Preventing research and management disturbance. In: Raptor Mgmt. Techniques, Ch. 10 (pp. 173-182). Nat. Wildlife Federation, Washington, D.C. (with R. W. Fyfe).
- Dynamics of founder populations established by reintroduction. In: Peregrine Falcon Populations. Ch. 66 (pp. 698-700). TPF, Inc. Boise, Idaho (with J. H. Barclay).
- Determinants of breeding distributions of ducks. Wildlife Monographs 100:1-37. (with D. H. Johnson).
- Population modeling: an introduction and overview. Pages 134-157 in Proc. Midwest raptor management symposium and workshop. Natl. Wildl. Fed., Washington, D.C.

- Biology of animal behavior. 2nd Ed. Times-Morror/Mosby, St. Louis. (college textbook). (with added coauthor T. Burk).
- Occurrence of the Upper Cretaceous ammonite *Rhaboceras* in the *Baculites eliasi* zone of the Pierre shale. J. Paleontology 66(3):521-523. (with J. C. Grier and J. G. Petersen).
- Differential effects of coyotes and red foxes on duck nest success. J. Wildl. Manage. 59:1-9 (with M.A. Sovada and A. B. Sargeant).
- 1995 Genetic variation and nesting bald eagles. Condor 97:282-283 (with R.L. Knight, G. R. Graig, M.H. Smith, and R. G. McLean).
- Integrated conservation plan for the Philippine eagle. Dept. of Environment and Natural Resources. Republic of the Philippines, Manila. 74 p. (with 14 coauthors).
- Population and habitat viability assessment for the Javan hawk-eagle (*Spizaetus bartelsi*). Conservation Breeding Specialist Group (SSC/IUCN), Apple Valley, MN. 169 p. (with J. Manansang, P. Miller, and U.S. Seal)
- New findings of the ammonite *Rhaeboceras*, including a new species, from the Pierre Shale of eastern Montana. J. Paleontology 72(3):473-476. (with J. C. Grier).
- Empirically derived survival rates of a native mussel, *Amblema plicata*, in the Mississippi and Otter Tail Rivers, Minnesota. Am. Midl. Nat 146:254-263.
- 2002 Changes in the freshwater mussel communities of Lake Pepin, Upper Mississippi river, Minnesota and Wisconsin, 1990-1997. Amer. Malacological Bulletin. 17:109-122.
- 2003 Report on the status of bald eagles in Ontario. Special publ., Ont. MNR. (with several coauthors)
- Distribution and nesting density of the Philippine eagle *Pithecophaga jeffery* on Mindanao Island, Philippines: what do we know after 100 years? Ibis [the primary international journal of ornithology]. 145:130-135. (with several coauthors)
- Simulation models of harvested and zebra mussel colonized threeeridge mussel populations in the Upper Mississippi River. Am. Midl. Nat. 151:301-317. (with several coauthors)
- Importance of facial pattern to sexual selection in golden-winged warbler (*Vermivora chrysoptera*). Auk 123:962-966. (Note: this paper was singled out for an invited overview in the same issue of the Auk.) (with E.R. Leichty)
- Determining the sources of northern goshawks passing through Duluth, Minnesota. The Loon 79:187-193. (with S.E. Hawks and D.L. Evans)
- 2007 Reducing management and Research disturbance [of raptors]. In: D.M. Bird and K.L. Bildstein, eds. Raptor Research and Management Techniques. Raptor Research Foundation, Hancock House Publ. pp. 351-364. (with Robert N. Rosenfield and Richard W. Fyfe).
- Synonymy of the ammonite genus *Ponteixites* Warren with *Rhaeboceras* Meek. Rocky Mtn. Geology, 42:123-136. (with Joyce C. Grier, Neal L. Larson, and Jack G. Petersen)
- Elementary school education in rainforest conservation and reforestation. Proceedings of the Wildlife Conservation Society of the Philippines. (with Joyce C. Grier, Angelito Cereno, Rachelle Montero, Harvey Ishiki, and Teresa Ishiki). *Banwa*. (Philippines), 3(1&2):96-107.
- New System for Digital to Analog Transformation and Reconstruction of 12-Lead ECGs. PLOS-one. April 11, DOI: 10.1371/journal.pone.0061076. (with several coauthors, from NASA and U. of MN)
- 3-D orientation and distribution of ammonites in a concretion from the Upper Cretaceous Pierre Shale of Montana. Swiss Journal of Palaeontology 134(2):257-279 (with N.H. Landman, J.C. Grier, J.K. Cochran, S.M. Klofak)
- Nautilid nurseries: hatchlings and juveniles of Eutrephoceras dekayi from the lower Maastrichtian (Upper Cretaceous) Pierre Shale of east-central Montana. Lethaia-An International Journal of Palaeontology and Stratigraphy: 51 (1): 48–74. (with Landman, N.H., J.K. Cochran, J.C. Grier, J.G. Petersen, and W.H. Tobin)
- Description of two species of Hoploscaphites (Ammonoidea: Ancyloceratina) from the Upper Cretaceous (Lower Maastrichtian) of the U.S. Western Interior. Bulletin of the American Museum of Natural History. No. 427, 72 pp. 38 fig., 4 tables. (with Landman, N.H., W.J. Kennedy, N.L. Larson, J.C. Grier, and T. Linn)
- Estimated workload intensity during volunteer aquarium dives. Occupational Medicine. 69 (3): 177–181. (with P. Buzzacott, J. Walker, C.M. Bennett, P.J. Denoble)
- 2019 Endothelial, Cardiovascular, and Performance Responses to L-arginine Intake and Resistance Exercise. International Journal of Exercise Science: 12 (2): 710 713. (with Streeter, D.M.;

- Trautman, K.A.; Bennett, T.W.; McIntosh, L.E.; Stastny, S.N.; and Hackney, K.J)
- Neither a Multi-Ingredient Pre-Workout Supplement nor Caffeine Were Effective at Improving Markers of Blood Flow or Upper-Body Resistance Exercise Performance. International Journal of Exercise Science 13(2): 167-182. (with M.S. Blake, N.R. Johnson, K.A. Trautman, S.N. Stastny, and K.J. Hackney)

#### **PUBLICATIONS**: - non-refereed, professional

- 1967 A preliminary bald eagle research report. Ontario Bird Banding. 3:1-4
- 1969 Wisconsin hearings to protect great-horned owls and eliminate pole-trapping. Hawk Chalk. 8(3):29-30.
- 1970 Radio telemetry for locating lost hawks. Hawk Chalk. 9(4):17-27.
- 1971 A solution to name tags and identification of hawks. Hawk Chalk. 10(2):51-52.
- 1972 Artificial insemination with imprinted raptors. Jour. No. Am. Falc. Assoc. 11:44-55. (with R. B. Berry and S. A. Temple).
- 1973 Aerial eagle census techniques as experienced in Ontario and Manitoba. Notes on a B. Eagle Nest Survey Workshop, U.S. Dept. Interior, F. & W. Service, Region 3 (11-20)
- 1978 College education and careers with wildlife. North Dakota Outdoors. 41(1):10-12. (with R. Crawford, Univ. of ND).
- Ecology: a simulation model for small populations of animals. Creative Computing. 6(7):116-121.

  1983 The 1980 article (above) was reprinted in a special collection book: "Computers in Science and Social Studies".
- 1987 Snakebite?! N.D. Outdoors 47:2-7.
- 1988 Forword to: The Bald Eagle by J. M. Gerrard and G. R. Bortolotti. Smithsonian Institution Press, Washington, DC.
- 1990 Software: Populations dynamics modeling (distributed privately, not through a company).
- 1990 Eagles. World Book Encyclopedia. Chicago, Il.
- 1990 Sovereign Wings: the bald eagle of North America. Thomassan-Grant, Charlottesville, VA.
- 1990 The Bald Eagle. Brochure produced for public distribution by Ontario Ministry of Natural Resources.
- 1991 Common sense, guidelines, policies, and procedures regarding venomous snakes. Notes from NOAH (Northern Ohio Assoc. of Herpetologists). 18(10):10-12.
- 1993 Snakes and the *Salmonella* situation. Bull. Chicago Herp. Soc. 23(3):53-29. (with Marty S. Bjerke and Lisa K. Nolan.)
- 1995 An underwater bird encounter. Wild Bird 9(1):50-51.
- Book review: Return of the bald eagle. Prairie Naturalist 27(3):178-179.
- Our American eagle/species profile: bald eagle (*Haliaeetus leucocephalus*). Wild Bird 10(8):26-29.
- Venomous reptiles and snakebite: a perspective for wildlife rehabilitators. NWRA Quart. 14(4):4-7.
- 1996 Education and research at the university (Editorial). The Forum, Fargo, ND, 8 December.
- 1997 Foreword to: Ammonites and other Cephalopods of the Pierre Seaway. BHIGR, publ., Hill City, SD.
- 1998 About Diving/Dive flag. Skin Diver 46(10):124.
- 2000 Preface for an e-book on the evolution of dog behavior
- 2001-07 General Biology II Laboratory Manual, 6 editions, Thompson/Brooks-Cole publ.
- 2008 Falcons. World Book Encyclopedia. Chicago, Il.
- 2006-16 Four web pages re. ECG (one initially for students in NDSU courses but expanded and they now receive world-wide audience (many hits per day based on feedback and inquiries)
- Behavior of the Golden Eagle: An Illustrated Ethogram. Coauthored Introduction with book author David Ellis, Illustrated by N. John Schmitt. Hancock House Publishers, Surrey, B.C.; Blaine, WA. 96 pp.
- A New Stratigraphy for the Pierre Shale at the Cedar Creek Anticline, Montana. AAPG (American Association of Petroleum Geologists) online publication of presentation, published by AAPG Datapages.

**PUBLICATIONS:** - Popular Writings - estimated over 300 columns and articles, including in Fargo Forum, Hawley Herald, online articles on ScubaDiving.com, and numerous others

#### PRESENTATIONS AT PROFESSIONAL MEETINGS: - not counting papers authored solely by students

- 1972 Artificial insemination in eagles. Raptor Research Foundation meeting, Sioux Falls, SD.
- 1973 Impact of ecological research disturbance on the birds being studied: an experimental approach. Canadian Wildlife Service, Ottawa, Canada.
- 1973 Non-parametric statistics. Canadian Wildlife Service, Stat. Conf., Ottawa, Canada.
- 1973 Bald eagle reproductive patterns. Raptor Research Foundation meeting, Ft. Collins, CO.
- 1973 Aerial censusing of bald eagles. U.S. Fish & Wildlife Service Eagle Conference, Minneapolis, MN.
- 1975 Artificial insemination in eagles. Amer. Assoc. Zool. Parks and Aquariums, Omaha, NE.
- Migratory movements of bald eagles in interior North America. Amer. Ornithol. Union, Winnipeg, Canada. (presented by J. Gerrard; also with C.R.Sindelar, and S. Postupalsky).
- 1976 Artificial insemination of golden eagles. Eagle Valley Environmentalists, Madison, WI..
- 1976 Predicting the success of raptor reintroductions through deterministic and stochastic models. Raptor Research Foundation meetings Cornell University, Ithaca, N.Y.
- 1977 Program and papers chairman for the North Dakota Wildlife Society annual meetings, Fargo, ND.
- 1977 Artificial insemination of eagles. U.S. Fish & Wildlife Meetings; Cleveland, Ohio.
- 1978 Status report on Ontario bald eagles. Raptor Research Foundation, Allentown, PA.
- 1978 Survey techniques to measure aerial visibility bias. Raptor Research Foundation, Allentown, PA.
- 1979 Chaired workshop on color marking of bald eagles. Raptor Research Foundation, Davis, CA.
- 1980 Chairman of scientific papers program. Raptor Research Foundation. Duluth, MN.
- 1980 Session chairman on population dynamics. Raptor Research Foundation. Duluth, MN.
- 1980 Populations: introduction and review. Raptor Research Foundation. Duluth, MN.
- Inducing golden eagles to shift nesting sites (for alleviating coal mining conflicts). Raptor Research Foundation. Duluth, MN. (with H.R. Postovit and J. Tate, Jr.)
- 1981 Chaired Meeting on Wintering Eagles for U.S. Fish and Wildlife Service, Washington, D.C., April.
- 1981 Co-authored (presented by co-author) "Nest platforms for golden eagles". Wilson Ornith. Meeting, New Brunswick, Canada.
- 1981 Co-authored (presented by co-author) "Directed relocation of an eagle nest site". Amer. Ornith. Union Meeting, Edmonton, Alberta.
- 1983 Co-hosted, presented report, public program at eagle meetings for Canada, Winnipeg, Canada.
- 1984 Conducted workshop and presented program on nesting eagles for Ontario Ministry of Natural Resources, Kenora, Ontario, Canada.
- "Status of Eagle Populations". International Eagle Conference. Organized and moderated the conference and presented one paper. Oct. 27-29, 1988, Minneapolis, MN.
- 1989 Poplation Modeling. Nat. Wildl. Fed. Regional Conference in Chicago.
- 1990 Status of the bald eagle in the northern U.S. Raptor Research Foundation annual meeting in Pennsylvania.
- "Importance of survival rates for populations of long-lived, slowly reproducing organisms," poster session, Wildlife 2001: Populations Conference, Oakland, CA.
- 1994 Chaired Symposium on Amphibian Research and Management, joint North Dakota and Minnesota Academies of Science, Fargo, April.
- "Computer simulations of Amblema plicata plicata populations in the presence of Dreissena polymorpha infestations, L. Pepin, Upper Mississippi River," 1st Symp. of Freshwater Mollusc Conservation Society, Chattanooga, TN, March. (presented by R. Hart, also with M. Davis and A. Miller)
- "Empirical survivorship rates of unionid mussels in the presence of *Dreissena polymorpha* infestations, L. Pepin, Upper Mississippi River," 9<sup>th</sup> International Zebra Mussel and Aquatic Nuisance Species Conference, Duluth, MN, April. (presented by R. Hart, also with M. Davis and A. Miller)
- 2002 poster at joint Wilson Society/Association of Field Ornithologists, Ft Meyers, FL (with Ellen Leichty)
- 2002 poster at SSIH meetings (with Natalie Gackle and other coauthors)

- oral presentation on 100th meridian boat survey and aquatic nuisance species at annual meeting of The Wildlife Society (presented by Grier, with coauthors)
- oral presentation at the annual Mississippi River research meetings (presented by Jeremy Guinn, coauthor)
- 2003 poster at SSIH meetings (with Mark Davis and coauthors)
- Northern Plains Biological Symposium, oral presentation on eagle work, plus several students presented oral presentations (and two of my grad students, M. Smith and M. Davis, were organizers and moderators of the symposium
- 2004 Chaired session on raptor ecology and conservation at ND TWS meeting
- oral presentation at ND TWS meeting on isotopes and goshawks (presented by Shawn Hawks)
- poster at ND TWS meeting on MN bald eagle habitat use and human disturbance (with Jeremy Guinn and coauthors)
- oral presentation at joint ornithological meetings, Ithaca, NY, on MN bald eagle habitat use and human disturbance (presented by Jeremy Guinn, with coauthors)
- 2006 Chaired session on ammonites at an international Symposium on the Late Cretaceous Western Interior Seaway of North America, Golden Colorado
- oral presentation on synonymizing a genus of ammonites at above-mentioned symposium
- 2007, 08 oral presentations on assessing environmental education at the elementary level on Mindanao, Philippines, at annual meetings of the Wildlife Conservation Society of the Philippines
- 2010 poster with coauthors (P. S. Gibbs, M. Smith, E. Sackreiter, H. M. Vinson) Genotypic and Antibiogram Comparison of Salmonella spp. Isolates from Multiple Populations of Snakes in the Upper Midwest. American Society for Microbiology, San Diego, California
- oral presentation with coauthors, presented by R.A. Hart: Survival Estimates and the Long Term Decline In Native Mussel Populations in Lake Pepin, Mississippi River: The Role of an Invasive Species. Joint Meeting of the Freshwater Mollusk Conservation Society and the Upper Mississippi River Conservation Committee, St. Charles, Missouri.
- oral presentation: Amanda Brooks, Dan Ewert, Kyle Hackney, and James W. Grier, presented by Amada Brooks. Discovery-Based Learning, A Microcosm of the Emerging Professional Research Environment. CUR (Council on Undergraduate Research) Biennial Conference 2016, Tampa, FL
- 2016 poster presentation: Nicholas Hugo, Lydia S. Tackett, Joyce Grier, James W. Grier, Neil H. Landman, presented by Nick Hugo. Westermann Morphospace Metrics Applied to Coexisting Upper Cretaceous Nautilids and Ammonites. GSA (Geological Society of America) Annual Meeting 2016, Denver, CO
- 2017 poster presentation: McIntosh, L.E., Bennett, T.W., Streeter, D.M., Stone, K.A., Grier, J.W., and Hackney, K.J., presented by Lauren McIntosh. Reliability of Measuring Heart Rate Variability Using a Polar Bluetooth Monitor and Kubios Analysis Software. NACSM (Northland Chapter of the American College of Sports Medicine) Student Conference 2017, St. Paul, MN
- oral presentation (invited): James W. Grier, Joyce C. Grier, Tom Linn, Neal L. Larson, and Neil H. Landman, presented by J.W. Grier. A New Stratigraphy for the Pierre Shale at the Cedar Creek Anticline, Montana. AAPG (American Association of Petroleum Geologists), Rocky Mountain Section Annual Meeting and WGA (Wyoming Geological Association 2019, Cheyenne, WY

# **SEMINARS AND OTHER PROFESSIONAL PRESENTATIONS**: (excluding several programs and seminars on NDSU Campus)

- 1973 Concordia College, Moorhead, MN.
- 1974 Northern Prairie Wildlife Research Center, Jamestown, ND.
- 1977 University of Minnesota, Duluth, MN.
- 1977 University of North Dakota, Grand Forks, ND.
- 1978 Jamestown College, Jamestown, ND.
- 1978 Ontario Ministry of Natural Resources, two seminars for biologists, at Red Lake and Kenora.
- 1978 Minnesota Ornithologists Union, Duluth, MN.
- 1981 Interview cited in National Wildlife.
- 1981 Photographs published in national/international publications.
- 1983 Banquet Program for a wildlife sanctuary dedication.
- 1983 Concordia College.

- 1983 Opening program for a public series at the Smithsonian Institution, Washington, D.C.
- 1984 Keynote Speaker, Association of Interp. Naturalists, Region 5 Workshop, Botineau, ND
- 1984 Moorhead State University.
- 1985 Seminars at:
  - 1) Texas A & I (Kingsville, TX)
  - 2) Univ. of Philippines at Los Banos (6 seminars)
  - 3) Univ. of Philippines at Diliman
  - 4) Haribon Foundation, Manila
  - 5) Program for meeting of diplomats and biologists, Kenora, Ontario
- 1986 Yale University, New Haven, Conn. (an endowed lecture).
- 1987-88 Presentations and Programs: 11, including UND Sigma XI, 2 presentations at Reptile Gardens in South Dakota, 2 talks in Canada, the Environmental Educational Council in Brainerd, public presentation to the Game and Fish Department in Bismarck, plus miscellaneous civic clubs etc.
- 1989 Fargo National Guard regarding poisonous snakes.
- 1989 Elderhostel presentation at NDSU.
- 1989 Keynote speaker at Catskills Center meeting in New York.
- 1989 Bureau of Land Management planning session, Boise, Idaho.
- 1989-90 Various meetings, consultations, in Philippines.
- 1990 Fargo Rotary Club
- 1990 Wahpeton Indian School
- "Guidelines on eagle management" for Ontario government, at Kenora, Ontario.
- 1991 "Environmental Conservation": seminar at Univ. of Southeastern Philippines.
- 1991 Lincoln Park Zoological Society, Chicago, IL.
- "Eagles and Education": ND Science Teachers Assoc. 4th Annual Conf., Fargo, ND.
- 1991-92 Seminars, presentations, and workshops at:

Manila, Philippines--

World Wildlife Fund

International School (two programs)

Invited group of businessmen and civic leaders

Television program, 1/2 hour interview

(plus several shorter news presentations, incl. CNN)

University of Philippines at Los Banos--

Guest lectures in courses (two)

Campus-wide seminar

Davao, Philippine Eagle Conservation Program Foundation--

Three workshops

- 1993 Fargo Library, presentation on international work to the Sierra Club
- 1993 Concordia College, presentation on bald eagles, joint meeting of Audubon Society and Sierra Club
- 1993 Sigma Xi seminar
- 1993 Warren, Minnesota, presentation to Agassiz Audubon Society
- 1994 Roseau, Minnesota, presentation to regional Audubon Society
- 1995 Univ. of North Dakota, Glenn Allen Pavr Memorial Lecture plus technical lecture.
- 1996 Fargo West Rotary Club
- 1996 Fargo Garden Club
- 1996 Black Hills Natural History Days, Hill City, SD
- 1996 Moorhead State University
- 1997 Univ. of the Philippines Mindanao, 16 hr. workshop on population dynamics
- 1998 Univ. of Minnesota, Dept. of Ent., Fisheries, and Wildlife
- 1998 MN Herpetological Society, seminar plus banquet program
- 1999 Fargo Rotary Club
- 2000 University of Wisconsin Stevens Point, seminar plus a colloquim
- 2001 North Dakota Science Teachers Association presentation
- 2001 Fargo Rotary Club
- 2001 Fargo Boy Scouts
- 2002 program/presentation at ND State School of Science, Wahpeton
- 2003 Fargo Camera Club

- banquet program at Detroit Lakes, MN, annual birding festival
- 2004 presentation on eagles for Ontario Ministry of Natural Resources, Kenora, Ontario
- 2005 Univ. of Minnesota-Crookston, two presentations
- 2006 Sitting Bull College, ND, presentation
- 2015 presentation on eagles and future directions for Ontario Ministry of Natural Resources, Kenora, Ontario

#### PROFESSIONAL CONSULTING ACTIVITIES:

1965-1980s:

- -Consultation on birds of prey for group preparing impact statement for the McKenzie River Oil Pipeline in Canada.
- -Consultation on eagles for Acres Consulting Co. of Niagra, Ontario, for a large lumbering and papermill operation in Ontario.
- -Consultation on eagles for a group working on a new town-site in Canada.
- -Consultation on birds of prey for the Ontario Ministry of Natural Resources.
- -Consultation on birds of prey, and especially eagles, for U.S. FWS.
- -Consultation for various films and books on eagles.
- -Walt Disney Productions, discussions and assistance on filming eagles, June-July 1981 (although final filming did not occur because of logistical problems).
- -Handled numerous telephone and written inquiries on eagles, raptors, and wildlife from state and federal agencies, private organizations and general public.
- 1982 Consultant to Minkota Power Co. on power line hawk problems.
- 1983-88 Assisted with eagle re-location projects in Ontario.
- 1983 Hosted a field-trip of professional colleagues and agency personnel to view eagles in Ontario.
- 1982, 1985, 1990-2006

Travelled to Philippines as consultant and advisor for conservation and captive-breeding of the Philippine eagle.

1996 Consulted with conservation personnel in Indonesia.

#### MISCELLANEOUS PROFESSIONAL ACTIVITIES:

Served as a reviewer for several journals, including:

Science

J. Wildlife Management

Wildlife Society Bulletin

Canadian Field Naturalist

The Auk

Wilson Bulletin

Raptor Research

Behavioral Brain Research

- 1973-90 liaison between the Zoology Department and the North Dakota Game and Fish Dept.
- Invited to attend meeting on Analysis of Bird Banding Data. (Selected attendance.) Utah SU. 1978-93 Chosen by the U.S. Fish and Wildlife Service as the Team Leader for the Northern States Bald Eagle Recovery Team to provide research direction for state and federally funded projects dealing with bald eagles. This team is responsible for a 24 state area. The position has involved meetings, chaired by J.W. Grier, in Bemidji, Duluth, and Twin Cities, MN Bangor, ME, Milwaukee, WI, Denver, CO, Davis, CA., and Washington, DC.
- 1974 Banquet Program for South Dakota Ornithologists Union Seminar at Vermillion, SD.
- 1975 Banquet Program at North Dakota National Science Society.
- 1972-75 Secretary of North American Falconers' Association.
- 1974 Edited a special commemorative issue of NAFA Journal.
- In an index covering the years 1962-1976 published for the Journal of the North American Falconer's Association, over 500 articles were included, and of these thirteen were selected as being most significant. Two of these 13 were authored by Dr. Grier. Only one other person had two articles in this list.
- 1977-80 Board of Directors, Raptor Research Foundation.
- 1981 Invited membership on international "World Working Group on Birds of Prey".

- 1983 MSU Ponderosa Science Center Development Group.
- advised group considering development of zoo for Fargo area.
- advised White House/President (at their request) on a presidential speech on bald eagles, plus attended ceremony with the President
- 2000-04 Prepared web page user's guide for a major, international scuba-diving magazine (at request of executive director)
- 2014-present Started collaborative research on scuba diving effects on cardiac function with colleagues at Divers Alert Network and Duke Univ., Durham, NC

## **RESEARCH GRANTS:** numerous grants from 1965 - 2006; subsequent funding (since retirement) on own and in collaboration with several colleagues.

2016 Assisted with NSF grant proposal with colleagues at NDSU re. collaborative/ team DBL education

#### ADMINISTRATIVE RESPONSIBILITIES

Departmental Committees and related activities

Departmental Graduate Committee 1973-80

Seminars chair 1973-91

Curriculum development and scheduling

Advisor to NDSU Wildlife Society, student chapter 1973-82

Assistant dept. chairman 1973-75

Maintain and supervise collection of live reptiles, amphibians, rodents and misc. other animals in the Zoology Dept. 1974-2006

Introductory Biology Courses Committee

Assessment of undergraduate writing

### College Committees and related activities

Scheduling and Registration, 1973-1979.

Curriculum Committee, 1979-2006. - (chair 1985-2005)

Development of joint animal behavior courses with Psychology.

Faculty Senator for Science and Mathematics, 1978.

Biology Review Committee (chairman), 1984.

PTE Committee, 2003-2004

#### **University Committees**

Helped develop cooperative education program.

Helped develop university computer software, e.g., for grading.

NDSU Senate Academic Affairs Committee 1988-91 (Chair 1989-91), 1998-99

Helped design system for quarter-to-semester conversion 1990-91

International Advisory Council, 1992-98

Academic Integrity Committee 1994-96

International major advisor/Sci & Math repr. for several years (1999?-2003)

NDSU Awards Committee/for Provost & VP for Academic Affairs (...2004-2006)

Academic Investigation Committee/for Provost & VP for Academic Affairs (2006)

#### CIVIC, COMMUNITY AND PUBLIC SERVICE

Active in several community affairs

Leader in local 4-H projects, 1970s

Has presented over one hundred talks, presentations and banquet programs to schools and organizations in New York, Wisconsin, Iowa, Minnesota and North Dakota; plus frequent consultation with public agencies or societies concerning birds, wildlife etc.

#### TELEVISION AND RADIO APPEARANCES

1974 WDAY (Fargo): Party-line

BBC-Time/Life series: Wild World of Animals (this program continued to be shown as a syndicated series nationally and internationally for several years)

- 1976 WDAY: News Special
- 1977 NBC:Johnny Carson, "Tonight Show"
- 1979 PPTV (ND):"Spin" program
- 1984 CBC radio interview (nationwide Canadian broadcast)
- 1988 CBS TV: Flight for Survival (on bald eagles)
- 1990 CBC radio interview (nationwide broadcast)
- 1991 PBS: New Explorers series (nationwide broadcast)
- 1992 CNN interview re: Philippine eagle
- 1990s A&E New Explorers -- revised and syndicated, repeated broadcasts
- 2002 interviewed about eagles on National Public Radio

Plus several local and network t.v. news segments, radio and (in other media) several newspaper feature articles

#### ART AND MISCELLANEOUS CREATIVE WORKS

1960s-70s 51 paintings, prints and drawings in existence at present (some published)

#### AWARDS AND SPECIAL RECOGNITION

(Note: a number of awards turned down through the years because of a personal dislike of awards.)

- Named Honorary Citizen of Ear Falls, Ontario, Canada, in recognition of eagle research in the area
- 1984 Citation by Premier of Ontario for research on eagles
- 1984 First Sigma Xi Research Award, NDSU chapter of Sigma Xi
- 1991 Dean's Award, NDSU College of Science and Math
- 1991 Honorary member of the Philippine Eagle Conservation Program Foundation
- 1993 Blue Key Distinguished Educator
- 1993 Fargo Chamber of Commerce Distinguished Professor
- 1994 Mortar Board Preferred Professor
- 1997 Mortar Board Preferred Professor
- 1998 OMNI Life Model, Chicago, Illinois
- 1998 NDSU Quarter Century Club recognition
- named one of 2000 Outstanding Scientists of the 20th Century
- an International Biographical Centre, Cambridge, International Man of the Year
- 1999 NDSU Faculty Lectureship
- 2000 Who's Who Among America's Teachers
- 2000 Golden Key Honorary Member
- 2006 BSGSA Sheila Kath Award for Outstanding Service to Graduate Students
- 2009 given an Indian name ("Kweenigh Puhakat" -- "carries eagle medicine") by the Comanche Nation in recognition of eagle work, special naming ceremony in Cyril, Oklahoma