/ XC: PC 11/17

## PLANNING COMMISSION EXHIBIT#58

## Geoffrey A. Hammerson

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## PRESENT OCCUPATIONS

# FILE COPY

- Research Zoologist, NatureServe
- Visiting Lecturer, Graduate Liberal Studies Program, Wesleyan University
- Independent Environmental Consultant

### **EDUCATION**

- B.S. Conservation of Natural Resources, 1972, University of California, Berkeley
- M.A. Biological Science, 1977, California State University, Hayward
- Ph.D. Biology, 1981, University of Colorado, Boulder

#### PROFESSIONAL EXPERIENCE

## Natural Resource Agencies and Conservation Organizations

- Research Zoologist; NatureServe, Association for Biodiversity Information, and The Nature Conservancy (1985-present): responsible for maintaining and updating information on the conservation status, management, and biology of North American vertebrates.
- Contractor, U.S. National Park Service (2004): inventory amphibians and reptiles in the Black Canyon of the Gunnison National Park and Curecanti National Recreation Area, Colorado.
- Contractor/Consultant, Colorado Division of Wildlife (2002-2004): Participated in establishment of Colorado Herpetofaunal Atlas.
- Contractor/Consultant, Palisades Interstate Park Commission, New York (2000-2001).
   Evaluated impact of proposed power plant on timber rattlesnakes; provided expert testimony.
- Contractor/Consultant, Connecticut Department of Environmental Protection (1998-2000): researched the population status, movements, habitat use, and conservation needs of timber rattlesnakes in central Connecticut.
- Zoological Consultant, South Central Connecticut Regional Water Authority, New Haven (1987-1988): made mammal, reptile, and amphibian field surveys; summarized wildlife habitat relationships; made wildlife management recommendations.
- Natural Resources Specialist, Departamento de Recursos Naturales de Puerto Rico, Puerta de Tierra, Puerto Rico (1983-1984): Principal investigator, Pittman-Robertson Project W-11, Population studies of Zenaida dove and scaly-naped pigeon; supervised 3 technicians; acted as interim Director of Section of Terrestrial Ecology.
- Consultant/Contractor, Colorado Division of Wildlife, Denver (periodic, 1980-2001): wrote book on identification, distribution, habitat associations, and natural history of amphibians and reptiles in Colorado; reviewed conservation status of amphibians and reptiles; conducted field surveys of rare reptiles and amphibians; established herpetofaunal database.

- Consultant, Colorado Division of Parks and Outdoor Recreation (1983): conducted field inventories of mammals, birds, reptiles, and amphibians at Roxborough State Park.
- Consultant, USDA Forest Service, Denver (1979): reviewed habitat relationships of amphibians and reptiles in FS Region 2.
- Biological Technician/Wildlife, U. S. Fish and Wildlife Service (1976): censused songbirds (Emlen method) and gray squirrels (live-trapping), sampled vegetation, made multi-frequency noise measurements at Geysers Geothermal Area, Sonoma County, California.

## Course Taught (Wesleyan University GLSP unless otherwise indicated)

- Vertebrate Natural History (California State University, Hayward, 1977)
- Ornithology (University of Colorado, Boulder, 1981)
- Principles of Ecology (University of Colorado, 1981, 1982)
- Introduction to Biology (Central Connecticut State University, 1985)
- Concepts in Biology (Central Connecticut State University, 1985)
- Biology of Marine Mammals (1985, 1988, 1992, 1996, 1999)
- Reptiles and Amphibians of Connecticut (1986, 1994)
- Endangered Wildlife of the United States (1986)
- Biology of Amphibians and Reptiles (1987, 1990; University of Colorado, 1990)
- Field Skills in Vertebrate Natural History (1987)
- Introduction to Biology (Middlesex Community College, 1987)
- Wildlife Management: Principles and Issues (1988)
- Coastal Ecology (1988, 1992, 1995, 2004)
- Freshwater Zoology (1989)
- Winter Ecology (1989, 1993)
- Natural History of Autumn (1989, 1992, 1995, 1998, 2001, 2004)
- Field Geology & Wildlife Ecology of the Rocky Mountains (1990, 1996)
- An Introduction to the Ecology and Wildlife of the Rocky Mountains (1990)
- Connecticut River: Natural History & Human Imprints (1990, 1993, 1996, 2000)
- Natural History of Spring (1991, 1994, 1997, 2000, 2004)
- Field Ornithology (1991, 1994, 1995, 1997, 2002)
- Mammals of New England (1991, 1994)
- Human Anatomy, University of Colorado (1991)
- Biology of Birds (1994, 1998, 2003)
- Conservation of Natural Communities (1995)
- Conservation Biology (GLSP & Biology Department, Wesleyan, 1997, 1999)
- Field Studies in Nocturnal Biology (1997)
- Field Ecology (Biology Department, Wesleyan, 1998)
- Field Geology, Ecology, and Wildlife of the Pacific Northwest (1998)
- Ecology (Biology Department, Wesleyan, 2000)
- Wetland Ecology (2002)
- Ecology of Landscapes and Organisms (Lyme Academy College of Fine Arts, 2003, 2004)

#### APPOINTED POSITIONS:

- Colorado Nongame Advisory Council (1981-1983), Vice-chairman (1983)
- Endangered Species Advisory Committee (Amphibians and Reptiles), Connecticut Department of Environmental Protection (1997, 2002)
- Haddam Wetlands Commission (1997-present)
- Amphibian and Reptile Advisory Committee, Colorado Natural Heritage Program (1997-1998)
- Vernal Pool Workgroup, Connecticut Association of Conservation and Inland Wetland Commissions and Connecticut Department of Environmental Protection (1999-2000)

#### SELECTED RECENT INVITED SPEAKING ENGAGEMENTS:

- Keynote Speaker on Vernal Pools, Connecticut Association of Conservation and Inland Wetlands Commissions, 21st Annual Meeting, 28 October 1997.
- Conference Moderator, Symposium on Vernal Pools in Connecticut, Connecticut DEP Wetland Management Section and Yale Center for Coastal and Watershed Systems, hosted by Wesleyan University, 15 November 1997 and 17 January 1998.
- University of Connecticut, Connecticut State Museum of Natural History, 6 May 2000 ("Timber Rattlesnakes in Connecticut").
- Fourteenth Annual Rockfall Symposium (Wildlife, People, and Land Use: Opportunities, Problems, and Solutions), 29 September 2000
- Mattabeseck Audubon Society, Housatonic Audubon Society, Connecticut: "Hidden Life of Timber Rattlesnakes in Connecticut," October 2001
- Connecticut Association of Conservation and Inland Wetlands Commissions, 25th Annual Meeting, 16 November 2002.

## REPORTS, THESES, AND PUBLICATIONS

- 1977 Thermal aspects of the ecology of five colubrid snakes from California. M.A. thesis, California State University, Hayward. 110 pp.
- 1977 Head-body temperature differences monitored by telemetry in the snake *Masticophis flagellum piceus*. Comparative Biochemistry and Physiology 57A:399-402.
- 1977 Hayward Hills area wildlife study. Hayward, California, Planning Department. 93 pp. (S. McGinnis, GAH, M. Heath, A. Smits, and D. Alcorn).
- 1978 An introduction to the natural history of the Cleary Reserve, northern Napa County, California. 28 pp. Report to the Biological Field Studies Association.
- 1978 Regions, communities, and terrain important in the conservation of amphibian and reptile species in Colorado. 34 pp. Appendix VI in D. W. Crumpacker, editor. A nature reserve system for Colorado. Report to the Colorado Department of Natural Resources.
- Observations on the reproduction, courtship, and aggressive behavior of the striped racer, *Masticophis lateralis euryxanthus* (Reptilia, Serpentes, Colubridae). Journal of Herpetology 12:253-255.
- 1979 Thermal ecology of the striped racer, Masticophis lateralis. Herpetologica 35:267-273.
- 1979 Structure and reproduction of "tree island" populations of Englemann spruce (*Picea englemannii*) and subalpine fir (*Abies lasiocarpa*) in the lower alpine tundra of Colorado. Journal of the Colorado-Wyoming Academy of Science 11:23-24.
- 1979 A preliminary distributional analysis of the herpetofauna of Colorado. Journal of the Colorado-Wyoming Academy of Science 11:84.

- 1980 The status of amphibian species in Colorado. Journal of the Colorado-Wyoming Academy of Science 12:38. (GAH and B. Lapin)
- 1980 The status of reptilian species in Colorado. Journal of the Colorado-Wyoming Academy of Science 12:38-39. (GAH and B. Lapin)
- 1980 Geographic distribution: Gastrophryne olivacea. Herpetological Review 11:13-14.
- 1980 Solitary flycatcher nest used by a western flycatcher. Wilson Bull. 92:511. (GAH and B. Lapin)
- 1980 Geographic distribution: Sceloporus undulatus elongatus. Herpetological Review 11:115. (GAH & Lapin)
- 1980 Vertebrates of Roxborough State Park and Natural Area. Colorado Div. Parks & Outdoor Rec. 31 pp. (Lapin & GAH).
- An ecogeographic analysis of the herpetofauna of Colorado, Ph.D. thesis, Univ. Colorado, Boulder. 418 pp.
- 1981 Opportunistic scavenging by Crotalus ruber not field-proven. Journal of Herpetology 15:125.
- Mammals of Roxborough State Park and Natural Area. Journal of the Colorado-Wyoming Academy of Science 13:64. (B. Lapin and GAH)
- 1981 Colorado amphibian and reptile distribution latilong study. 2nd ed. Colorado Division of Wildlife. (GAH, Langlois)
- The first record of *Rana sylvatica* from the Southern Rocky Mountains and other early collections of Arthur E. Beardsley, Herpetological Review 13:10.
- Amphibian and reptile distribution in Colorado: corrections of erroneous records. Herpetological Review 13:53-54.
- 1982 Geographic distribution: Leptotyphlops dulcis. Herpetological Review 13:82. (B. Lapin and GAH)
- 1982 Bullfrog eliminating leopard frogs in Colorado? Herpetological Review 13:115-116.
- 1982 Amphibians and reptiles in Colorado. Colorado Division of Wildlife, Denver. vii + 131 pp.
- Survey and analysis of existing information on reptiles and amphibians in Northwest Colorado, and a summary of amphibian and reptilian responses to environmental contamination and modification. Northwest Colorado Wildlife Consortium, Final Report to Bureau of Land Management, Craig District Office, Colorado. 132 pp.
- 1983 Getting along with snakes. Colorado Outdoors 32(4):26-31.
- 1983 The pied-billed grebe. Colorado Outdoors 32(6):28-31. (B. Lapin and GAH)
- 1983 Geographical ecology and variation in the lizard *Sceloporus undulatus* in Colorado. Journal of the Colorado-Wyoming Academy of Science 15:48-49.
- 1984 More corrections of erroneous amphibian and reptile records from Colorado. Herpetological Review 15:21-22.
- 1984 Vertebrates in Roxborough Park, July 1982, April-May 1983. Colorado Div. Parks & Outdoor Recreation.
- Final Report, Study 1, Pittman-Robertson Project W-11. Studies of resident gamebirds: Zenaida dove and scaly-naped pigeon. Major hunting sites and land ownership. Puerto Rico Dept. of Natural Resources.
- Annual Report, Studies 2, 3, and 4, Pittman-Robertson Project W-11. Studies of resident gamebirds: Zenaida dove and scaly-naped pigeon. Study 2: Status, abundance, and population trends. Study 3: Breeding season. Study 4: Hunting activity and effort. Puerto Rico Department of Natural Resources.
- 1985 Some erroneous ideas about snakes. Colorado Outdoors 34(4):39.
- 1987 Wildlife of South Central Connecticut Regional Water Authority properties: status, habitat use, and management recommendations. Report to South Central Connecticut Regional Water Authority, New Haven, Connecticut. (GAH and D. Rosgen).
- 1987 Thermal behaviour of the snake *Coluber constrictor* in west-central California. Journal of Thermal Biology 12:195-197.
- 1988 Diet of the common barn-owl in Middlefield, Connecticut. The Connecticut Warbler 8(3):60.
- 1988 Life history notes: Opheodrys aestivus. Herpetological Review 19:85.
- 1988 A field survey of Colorado's rarest reptiles and amphibians: final report. Colorado Natural Areas Program and Colorado Division of Wildlife, Denver.
- Amphibians in western Jackson County, Colorado: a summary of field observations made in the vicinity of Lone Pine Creek, Big Creek Lakes, and Arapaho Lakes, August 1989. Final report to The Nature Conservancy, Colorado Chapter, Boulder, Colorado. 17 pp.
- 1989 A field survey of amphibians in the Rocky Mountains of Colorado, August 1989. Final report to Colorado Division of Wildlife and Colorado Natural Areas Program. 53 pp.
- 1989 Effects of weather and feeding on body temperature and activity in the snake *Masticophis flagellum*. Journal of Thermal Biology 14:219-224.

- The correct spelling of the name of the short-horned lizard of North America. Bulletin of the Maryland Herpetological Society 27(3):121-127. (GAH and H. M. Smith)
- Distributional addenda for the smooth green snake (*Opheodrys vernalis*) in western Colorado, and the status of its subspecies. Bulletin of the Maryland Herpetological Society 27 (2):99-106. (H. M. Smith, GAH, J. J. Roth, and D. Chizar).
- 1991 Geographic distribution: Leptotyphlops dulcis. Herpetological Review 22:103. (GAH, Valentine, and Livo)
- 1991 Geographic distribution: Bufo debilis, Bufo punctatus, Spea intermontana, Kinosternon flavescens, Gambelia wislizenii, Arizona elegans, Coluber constrictor, Crotalus viridis, Masticophis flagellum, Rhinocheilus lecontei, Sistrurus catenatus, Tantilla hobartsmithi, Tantilla nigriceps, Lampropeltis getula. Herpetological Review 22:64-69. (GAH, L. Valentine, and L. J. Livo)
- 1992 Field surveys of amphibians in the mountains of Colorado, 1991. Final report, Colorado Division of Wildlife, Denver.
- 1993 Geographic distribution: *Bufo cognatus, Pseudacris triseriata, Rana pipiens, Eumeces multivirgatus multivirgatus, Crotalus viridis viridis, Nerodia sipedon, Tantilla nigriceps, Thamnophis sirtalis.* Herpetological Review 24:152-157. (Smith, GAH, Chiszar, and Ramotnik)
- Interrelationships between water economy and thermoregulation in the canyon treefrog, *Hyla arenicolor*. Journal of Arid Environments 25(3):321-329 (G. K. Snyder and GAH)
- Beaver (*Castor canadensis*): ecosystem alterations, management, and monitoring. Natural Areas Journal 14:44-57.
- 1998 Summary of amphibians and reptiles introduced into Colorado. Northwestern Naturalist 79:1-11. (L. J. Livo, GAH, and H. M. Smith).
- 1998 Geographic distribution: Tantilla hobartsmithi. Herpetological Review 29:55. (GAH and A. D. Benedict)
- 1998 Status of chorus frogs (genus *Pseudacris*) in southeastern Colorado. Bulletin of the Maryland Herpetological Society 34:22-28. (Livo, GAH, Smith, Chiszar, and Mackessy)
- Our hidden wetlands; an introduction. Page 2 in: Our hidden wetlands: the proceedings of a symposium on vernal pools in Connecticut 1998. Yale University & Connecticut Department of Environmental Protection.
- 1998 Conservation status of the northern cricket frog (*Acris crepitans*) in Colorado and adjacent areas at the northwestern margin of the range. Herpetological Review 30:78-80. (GAH and L. J. Livo).
- 1999 Amphibians and reptiles in Colorado. 2nd edition. University Press of Colorado, Boulder. xxvi + 484 pp.
- A remarkable array: species diversity in the United States. Pages 55-92 in Stein, B. A., J. S. Adams, and L. S. Kutner, eds. Precious heritage: the status of biodiversity in the United States. Oxford University Press, New York. (Stein, B. A., J. S. Adams, L. L. Master, L. E. Morse, and GAH).
- Vanishing assets: conservation status of U.S. species. Pages 93-118 in Stein, B. A., J. S. Adams, and L. S. Kutner, eds. Precious heritage: the status of biodiversity in the United States. Oxford University Press, New York. (Master, L. L, B. A. Stein, L. S. Kutner, and GAH).
- State of the states: geographic patterns of diversity, rarity, and endemism. Pages 119-158 in Stein, B. A., J. S. Adams, and L. S. Kutner, eds. Precious heritage: the status of biodiversity in the United States. Oxford University Press, New York. (Stein, B. A., L. S. Kutner, GAH, L. L. Master, and L. E. Morse).
- Book Review: Busher, P. E., and R. M. Dzieciolowski, editors. 1999. Beaver protection, management, and utilization in Europe and North America. Kluwer Academic/Plenum Publishers, New York. Journal of Wildlife Management 64:888-890.
- 2001 Population status, movements, and habitat use of timber rattlesnakes (*Crotalus horridus*) in central Connecticut: Final report, 1998-2000. Final report, Connecticut Department of Environmental Protection, Hartford. 88 pp. (GAH and R. Lemieux)
- 2001 River fauna. Pages 26-31 Tidal waters of the Connecticut River: an explorer's guide to hidden coves and marshes. River's End Press, Essex, Connecticut.
- 2004 Connecticut Wildlife: Biodiversity, Natural History, and Conservation. University Press of New England, Hanover, New Hampshire. xviii + 465 pp.
- 2004 Capturing expert knowledge for threatened species assessments: a case study using NatureServe conservation status ranks. Acta Oecologica 26:95-107. (T. J. Regan, L. L. Master, and GAH)
- 2004 Targeted inventory of reptile and amphibian species, Black Canyon of the Gunnison National Park and Curecanti National Recreation Area. Preliminary Field Report. Submitted to National Park Service, Moab Utah.

In Press Correlations among extinction risks assessed by different systems of threatened species categorization.

Conservation Biology. (J. J. O'Grady, M. A. Burgman, D. A. Keith, L. L. Master, S. J. Andelman, B. W. Brook, GAH, T. Regan, and R. Frankham)