



VIA FACSIMILE AND EMAIL ONLY

April 28, 2014

The Honorable Tom Vilsack, Secretary
U.S. Department of Agriculture
1400 Independence Ave., SW
Washington, D.C. 20250-0003

Re: Opposition to USDA-APHIS Planned Raven Control in Idaho

Dear Secretary Vilsack:

The undersigned local, regional and national conservation groups write to request the United States Department of Agriculture (USDA) through Animal and Plant Health Inspection Services-Wildlife Service (Wildlife Services) abandon its planned partnership with the Idaho Department of Fish and Wildlife (IDFG) to shoot, poison, and euthanize over 4,000 Common ravens in and around southern Idaho. Wildlife Services' proposal and environmental assessment fails the most basic principles of scientific investigation; ignores the central threats to Greater sage-grouse habitat and populations throughout Idaho (wildfire, weeds, fragmentation and livestock grazing); fails to fully examine the direct, indirect and cumulative impacts of using the avicide DRC-1339 across the southern Idaho landscape; and will fail to achieve any replicable and tenable scientific conclusions on the impact of raven control on sage-grouse nest success. For these reasons, we respectfully ask that Wildlife Services abandon this project, and refocus its efforts on improving sage-grouse habitat and populations through more scientifically supportable methods.

In its Environmental Assessment, entitled SUPPLEMENT TO THE ENVIRONMENTAL ASSESSMENT: PREDATOR DAMAGE MANAGEMENT IN SOUTHERN IDAHO (March 2014) (EA), Wildlife Services claims this project will "evaluate whether raven removal can help enhance sage-grouse populations in areas where habitat management and nonlethal raven management efforts to date do not appear to be sufficient to restore populations." EA at 4-5. But, as noted in the attached comments from Dr. Clait Braun, a leading sage-grouse expert and past Chair of Wildlife Service's own National Advisory Committee, this project "is not well designed nor

scientifically supported, especially because the project lacks scientific controls and no scientific way to measure success of the project. **Due to the failures in the design of this project, no tenable scientific data will be gathered.** See attached, at pp. 2-3 (emphasis added). According to Dr. Braun, “[t]his project should be expected to pass stringent tests of scientific justification and compelling logic. Unfortunately, it fails those tests.” *Id.* at 3.

In addition to being scientifically invalid, Wildlife Services’ proposal is equally unnecessary. In the EA, Wildlife Services admits that raven predation is not a “significant *range-wide* threat” to Greater sage-grouse, and the Conservation Plan for the Greater Sage-Grouse in Idaho similarly concludes that raven predator was not a “priority threat to sage-grouse statewide.” EA at 2. The U.S. Fish and Wildlife Service’s own 2013 Conservation Objectives Team Report (COT Report) similarly ranks all predation as the 17th threat to Greater Sage-Grouse populations. The U.S. Geological Survey reached the same conclusions in its recent report, entitled SUMMARY OF SCIENCE, ACTIVITIES, PROGRAMS, AND POLICIES THAT INFLUENCE THE RANGEWIDE CONSERVATION OF GREATER SAGE-GROUSE (*CENTROCERCUS UROPHASIANUS*) (concluding that “there is little published support for predation being a limiting factor in sage-grouse populations”). In light of the scientific information establishing predation as a minor threat to sage-grouse populations, Wildlife Services would be wise to focus its limited budget, manpower and resources in more constructive pursuits.

Moreover, Wildlife Services’ EA does not adequately examine the direct, indirect and cumulative impacts of Wildlife Service’s proposed application of DRC-1339 across southern Idaho, providing further cause to abandon this joint project. For example, in its Tech Note on DRC-1339, Wildlife Services admits that owls are sensitive to DRC-1339, and several different species of owl are located within and throughout the treatment areas. Yet, Wildlife Services makes no effort at quantifying the direct, indirect and cumulative risks of applying DRC-1339 on owls and other sensitive, non-target species. Nor does Wildlife Services’ EA examine the likely impacts on sage-grouse of its construction of additional predator perches (to serve as so-called bait stations) throughout sage-grouse habitat in southern Idaho, and Wildlife Services failed to examine any alternative to the proposed raven killing experiment.

Finally, Wildlife Service’s application of the avicide DRC-1339 as proposed is inconsistent with the Environmental Protection Agency’s (EPA) registration label. See EPA Registration No. 56228-29. According to the registration label, Wildlife Services is not permitted to “store, apply or even temporarily place treated bait in locations accessible to children, pets, domestic animals, or non-target wildlife.” See EPA Registration No. 56228-29, at 2. The label also has specific “ENTRY RESTRICTIONS,” which notes, “Keep persons other than authorized handlers, as well as pets and livestock, away from the bait at all times. Only protected handlers may be in the areas during bait application. Exclude all unauthorized persons from application sites during prebaiting and baiting.” *Id.* Wildlife Services’ plan does not adhere to these restrictions, and Wildlife

Services' provides no account of how it intends to exclude adults, children, pets and domesticated animals from the poisoning locations. Indeed, based on the breadth of the poisoning areas, it is impossible for Wildlife Services to comply with these limitations, absent an around-the-clock monitoring effort that is not included in the current proposal. Importantly, unlike the State of Idaho's Supplemental Labeling for use of DRC-1339 in feedlots, SLN No. IS-050014, Wildlife Services cannot comply with the EPA's registration label by posting the area with warning signs during the baiting operation.

For these reasons, in addition to the reasons explicated in our respective comments on the Supplemental EA, the undersigned groups request APHIS-Wildlife Services abandon its ill-conceived project to poison, shoot, crush and euthanize up to 4,000 ravens in Idaho, and turn its attention to more pressing demands designed to reduce sage-grouse depredation, including improving habitat, quickly removing carrion on the public lands, and other measures.

Please feel free to contact us if you would like to continue this discussion, or of you have any additional questions. We can be reached at the contact numbers below.

Very truly yours,

Todd C. Tucci, Senior Attorney
Advocates for the West
1331 E Street SE
Washington, D.C. 20003
208.724.2142
ttucci@advocateswest.org

Steve Holmer, Senior Policy Advisor
American Bird Conservancy
1731 Connecticut Ave, NW #300
Washington, D.C. 20009
202.888.7490
sholmer@abcbirds.org

Julie Randell, Conservation Chairperson
Prairie Falcon Audubon Society
3952 North 3600 East
Kimberly, ID 83341
2randells@randellrj.myrf.net

Michele Crist, President
Golden Eagle Audubon Society
Boise, ID
208.863.1918
mrcgoldeneagle@gmail.com

Travis Bruner, Executive Director
Western Watersheds Project
PO Box 1770, Hailey, ID 83333
208.788.2290
travis@westernwatersheds.org

Mike Daulton, Vice President, Government Relations
National Audubon Society
1200 18th Street NW Suite 500, Washington, D.C. 20036
202.861.2242
mdaulton@audubon.org

John Robison, Public Lands Director
Idaho Conservation League
PO Box 844, Boise ID 83701
208.345.6933
jrobison@idahoconservation.org

cc (via email only):

Ed Avalos, Under Secretary for Marketing and Regulatory Programs (MRP)
(ed.avalos@osec.usda.gov)
Max Holzman, Acting Dep. Under Secretary MRP (max.holzman@osec.usda.gov)
Kevin Shea, USDA-APHIS Administrator (kevin.shea@osec.usda.gov)
Todd Grimm, Idaho State Director, Wildlife Services
(todd.k.grimm@aphis.usda.gov)

SENT VIA TELEPHONE FACSIMILE ONLY

State Director
USDA APHIS Wildlife Services
9134 W. Blackeagle Drive
Boise, ID 83709
FAX (208) 378-5349

Re: Comments on Wildlife Service's Supplement to the Environmental
Assessment: Predator Damage Management in Southern Idaho

To Whomever It May Concern:

1. My name is Clait E. Braun, and I reside in Tucson, Arizona.
2. I have a B.S. in Technical Agronomy from Kansas State University, a M.S. in Wildlife Management from the University of Montana, and a Ph.D. in Wildlife Biology from Colorado State University. In addition, I have attended numerous short courses, workshops, technical sessions, etc., to remain current in my professional work and am a Certified Wildlife Biologist.
3. I was a Research Wildlife Scientist, Wildlife Research Leader, and Avian Program Manager for the Colorado Division of Wildlife during 1969-99. In addition, I taught as an Instructor at the University of Montana (1963-65) and Colorado State University (1966-69), and have been an invited lecturer at more than 20 U.S. and Canadian universities. I also worked as a Soil Scientist in Montana (1964) and Kansas (1961) for the U.S.D.A, Soil Conservation Service and as a Research Technician with the Montana Department of Fish and Game (1965).
4. My field research was primarily on different species of birds, especially grouse (1965-2013). I specifically conducted and directed research on sage-grouse (*Centrocercus* spp.) throughout Colorado from 1973 through 1999.

My research on sage-grouse has caused me to review sagebrush-steppe ecosystems (plants and animals) throughout all western states and provinces. This research has led to more than 300 scientific publications, mostly in peer-reviewed journals. A copy of my biographic sketch is attached.

5. I served on the National Advisory Committee for Wildlife Services (USDA, APHIS) during 1999-2005 as Vice Chair and Chair, and during 2008-2009 as Chair.

6. I thoroughly reviewed Wildlife Services' Supplement to the Environmental Assessment: Predator Damage Management in Southern Idaho, dated March 2014, as well as appropriate scientific papers.

General Conclusions

a. The proposed common raven (*Corvus corax*) control effort to increase protection (recruitment) of sage-grouse (*Centrocercus urophasianus*) as measured by counts of males on leks through improved nest success and chick survival of sage-grouse over a 2-year interval (2014-2015) is without merit as no benefit to recruitment of breeding populations of the species is expected and none will be able to be demonstrated. Further, such benefit has not been demonstrated for any wild population of Galliformes (*Phasianidae: Tetraoninae*).

b. The proposed common raven control action is not well designed nor scientifically supported, especially because the project lacks scientific controls and no scientific way to measure success of the project. Due to the failures in the design of this project, no tenable scientific data will be gathered. Indeed, it

appears that this project represents nothing more than Wildlife Services' efforts to indiscriminately kill over 4,000 ravens, and to shift the blame on sage-grouse declines away from habitat degradation (from energy development, infrastructure, weeds, fire, and livestock grazing, etc.) and towards predation. But, in its recent listing rule concluding that sage-grouse warrant protection under the Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) did not include predation as a major factor of concern for maintenance of populations of greater sage-grouse.

c. This proposal avoids any mention of the devastating actions by public land management agencies in failing to properly manage habitats useful to sage-grouse on public lands.

d. This project should be expected to pass stringent tests of scientific justification and compelling logic. Unfortunately, it fails those tests.

Specific Comments

a. The goal of the proposed action is to assess the efficacy of common raven removal to aid in protection and restoration of sage-grouse populations. No data are presented that raven predation of eggs or young of sage-grouse are related to the decline in the long-term trend in sage-grouse counted on leks in Idaho. No data are presented that removal of ravens will increase numbers of sage-grouse counted on leks in Idaho nor are data presented to indicate that removal of ravens has increased the numbers of sage-grouse counted on leks anywhere. Please present all data supporting Wildlife Services' underlying premise that raven predation of sage-grouse eggs or young is related to the decline of sage-grouse in Idaho.

b. Common ravens and many other species have been documented to eat sage-grouse eggs. The specific impact of common raven predation on sage-grouse nest success and survival of chicks is unknown, despite a modeling study in Nevada. The available data do not suggest that removal of common ravens will increase counts of sage-grouse on leks in year 1 (2014) or year 2 (2015). Indeed, the recent paper by Robinson and Messmer (2013, Human-Wildlife Interactions) indicated that sage-grouse survival rates, nest success, and brood success were greater in an area receiving less intense predator control and no raven control compared to an area with more overall predator control and raven removal.

c. The data that suggest that numbers of common ravens are increasing are based on estimates and not on replicated distance sampling. Thus, the estimated common raven densities are likely biased high.

d. No evidence is presented to eliminate other predators or other causes (habitat loss, fragmentation, degradation) as being involved in the declines in sage-grouse counted on leks in Idaho.

e. The Idaho Conservation Plan for Greater Sage-grouse (Appendix A) does not recommend predator control unless nest success of sage-grouse is less than 25% or survival of adult hens is less than 45%. Their data suggests that sage-grouse nest success and survival of adult hens currently exceeds these rates, and Wildlife Services provides no rationale or reason to undertake predator control in this situation. The USFWS in their 2010 ruling did not find that predation was a major threat to stability of greater sage-grouse populations. The USFWS ruling found the most immediate threats to greater sage-grouse were (1)

inadequacy of existing regulatory mechanisms, and (2) present or threatened destruction, modification or curtailment of habitat of the species.

f. Elevated platforms are suggested as a method to make eggs containing DRC-1339 available to common ravens. This methodology may also make the avicide available to non-target avian species, and Wildlife Services never examined this potential cumulative impact in its environmental assessment. Moreover, it appears that Wildlife Services intends to use DRC-1339 in direct contravention of the limitations including in the pesticide registration label.

g. The scientific literature (Cote and Sutherland 1997; reviewed by Hagen 2011) has discredited the premise that predators adversely affect bird populations including sage-grouse nesting success and recruitment. Again, Wildlife Services never examines this scientific information in its environmental assessment.

h. The methodology does not suggest Wildlife Services took a hard look at impacts and purposes of the proposed action.

Conclusions

I have spent much of my career designing and implementing scientific studies designed to gather reliable, informed, and replicable scientific information on greater sage-grouse populations, trends, and habitat conditions. The Wildlife Services' proposed raven killing 'experiment' fails to meet the most basic elements of scientific investigation, and will produce no reliable, informed, or replicable data on the impacts of raven populations on sage-grouse nests and recruitment. Moreover, the proposed protection effort will not be able to

demonstrate any benefits to sage-grouse, it is controversial in terms of use of DRC-1339 because of potential effects on non-target avian species, and the entire project requires a more complete and comprehensive review. This project is unprofessional, indefensible, any results will not be credible, and there is no real science involved. No benefits to sage-grouse will be documented based on science (as there is no science).

/s/ Clait Braun
Clait E. Braun, Ph.D.
Grouse Inc.
5572 N. Ventana Vista Road
Tucson, Arizona 85750
Phone and FAX: 520-529-4614

Cc (email only):

Edward Avalos, Under Secretary for Marketing and Reg. Programs,
ed.avalos@osec.usda.gov

Joani Walsh, Deputy Under Secretary for Marketing and Reg. Programs,
joani.walsh@osec.usda.gov

Kevin Shea, Administrator, Animal and Plant Health Inspection Services,
kevin.a.shea@aphis.usda.gov

William H. Clay, Deputy Administrator, Wildlife Services,
bill.clay@aphis.usda.gov

BIOGRAPHICAL SKETCH

Clait E. Braun, Grouse Inc., 5572 N. Ventana Vista Road, Tucson, AZ 85750
E-mail: sgwtp66@gmail.com, sg-wtp@juno.com
Phone/Fax 520-529-4614

Born: 4 October 1939, Kansas City, Missouri, USA

Academic Training

B.S. 1962. Technical Agronomy, Kansas State University, Manhattan
M.S. 1965. Wildlife Management, University of Montana, Missoula
Ph.D. 1969. Wildlife Biology, Colorado State University, Fort Collins

Experience (50 years of study of species of grouse, including Sage-Grouse)

Director, Grouse Inc., Tucson, AZ (2000-Present)
Avian Research Program Manager, Colorado Division of Wildlife
Wildlife Research Leader-Avian, Colorado Division of Wildlife
Soil Scientist, Soil Conservation Service, USDA, Kansas and Montana

Memberships

The Wildlife Society

Editor (*Journal of Wildlife Management*) (1981-83)

Vice President, President, Past President

Charter and Founding Member of Colorado and Montana Chapters

Editor, Sixth Edition, *The 'Techniques Manual'* (2005)

Fellow

The Wilson Ornithological Society

Elected Board Member, Vice President, President

Life Member

Editor (*Wilson Journal of Ornithology*) (2007-2012)

Colorado-Wyoming Academy of Science

Elected Board Member, Treasurer, President, Life Member

American Ornithologist's Union

Elected Member, Elected Fellow, Life Member

Cooper Ornithological Society: Life Member

American Society of Mammalogists: Life Member

Great Plains Natural Science Society: Life Member

American Association for the Advancement of Science (1969-2014)

American Men and Women of Science

Who's Who in the West

Personalities of the West and Midwest

Dictionary of International Biography

Professional Achievement Awards

Colorado State University
Colorado-Wyoming Academy of Science
Gunnison Sage-Grouse Stewardship Award
The Wildlife Society (Chapter, Section, National)
U.S. Department of Agriculture (SCS)
Western Agencies Sage & Columbian Sharp-tailed Grouse Technical Committee
---Robert L. Patterson Award
Wilson Ornithological Society---Klamm Award

Publications

Over 300 Technical Articles (especially on grouse) published in Peer-reviewed and Non Peer-reviewed Journals, Symposia, Proceedings (List Available upon Request)

Referee

Peer Reviewer for 20+ National/International Journals

Technical Editor or Editor

Multiple Books and Proceedings, and Professional International Journals
Most Recent
Greater Sage-Grouse; Ecology and Conservation of a Landscape Species and its Habitats. 2011. Studies in Avian Biology, Number 38. 645 pp.
Quail VII: Proceedings of the Seventh National Quail Symposium: 2012: 386 pp.

Consultant

County (Gunnison, Colorado), State (Nevada, New Mexico, Oregon, Utah, Wyoming), Federal (USFWS), and Provincial (Alberta) governments, and Private Entities (NGO's, Private Ranchers)

Professional Interests

Birds (especially Grouse and Columbids), Habitat Management, Alpine Ecology, Sagebrush-steppe, Population Dynamics

National Advisory Committee, Wildlife Services (USDA, APHIS)

1999-2005, Vice Chair and Chair
2008-2009 Chair

**Publications of Clait E. Braun
1963-2014**

1963

Braun, C. E. and R. D. Taber. 1963. The Missoula hunter: expenditures and bag, 1956-1962. Proceedings of the Montana Academy of Science. 23: Abstract.

1965

Braun, C. E. 1965. A survey of land values directly attributable to waterfowl within the contiguous United States. Thesis. University of Montana, Missoula, USA.

1966

Braun, C. E. 1966. Waterfowl clubs and the economic values of land for waterfowl hunting in the Pacific Flyway. Annual Meeting, Northwest Section, The Wildlife Society 1966: Abstract.

Braun, C. E. 1966. Waterfowl clubs and the economic values of land for waterfowl hunting in the Central Flyway. Transactions of the Central Mountains and Plains Section, The Wildlife Society 11: 3.

1967

Braun, C. E. and G. E. Rogers. 1967. Sex and age determination of white-tailed ptarmigan. Annual Meeting, Northwest Section, The Wildlife Society 1967: 3.

Braun, C. E. and G. E. Rogers. 1967. Habitat and seasonal movements of white-tailed ptarmigan in Colorado. Journal of the Colorado-Wyoming Academy of Science 5(8): 74-75.

Braun, C. E., and G. E. Rogers. 1967. Determination of age and sex of the Southern white-tailed ptarmigan. Outdoor Facts, Game Information Leaflet 54. Colorado Division of Game, Fish and Parks, Fort Collins, USA.

Braun, C. E. and W. B. Willers. 1967. The helminth and protozoan parasites of North American grouse (Family: Tetraonidae): a checklist. Avian Diseases 11: 170-187.

Braun, C. E. and G. E. Rogers. 1967. Ecology of the white-tailed ptarmigan in Colorado: a preliminary report. Colorado Field Ornithologist 2: 6-9.

Rogers, G. E. and C. E. Braun. 1967. Ptarmigan. Colorado Outdoors 16(4): 22-28.

Braun, C. E. 1967. The future of public hunting. Colorado Outdoors 16(6): 13-14.

1968

- Braun, C. E. and R. G. Streeter. 1968. Observations on the occurrence of white-tailed jackrabbits in the alpine zone. *Journal of Mammalogy* 49: 160-161.
- Braun, C. E. and G. E. Rogers. 1968. Some aspects of the winter ecology of white-tailed ptarmigan in Colorado. Annual Meeting, Northwest Section, The Wildlife Society 1968: Abstract.
- Streeter, R. G. and C. E. Braun. 1968. Observations of pine marten in Colorado alpine areas, 1966-1967. *Journal of the Colorado-Wyoming Academy of Science* 6(1): 62.
- Braun, C. E. 1968. Plumages and molts of the Southern white-tailed ptarmigan. Annual Meeting, The Cooper Ornithological Society 39: Abstract.
- Braun, C. E., G. E. Rogers, and R. K. Schmidt Jr. 1968. Techniques of white-tailed ptarmigan population studies in Colorado, Joint Annual Meeting, Western Bird-banding Association and Colorado Field Ornithologists 6: Abstract.
- Rogers, G. E. and C. E. Braun. 1968. Ptarmigan management in Colorado. *Proceedings of the Western Association of State Game and Fish Commissioners* 48: 272-277.
- Streeter, R. G. and C. E. Braun 1968, Occurrence of pine marten, *Martes americana*, (Carnivora: Mustelidae) in Colorado alpine areas. *Southwestern Naturalist* 13: 449-451.
- Braun, C. E. 1968. Wildlife in Granite County. *In* R. G. Dunmire, J. B. Seago, J. Harchenko, and D. Taylor. Soil survey of the Philipsburg-Drummond area, Montana. U.S. Department of Agriculture, Soil Conservation Service, Washington, D.C., USA.

1969

- Braun, C. E. and D. L. Pattie. 1969. A comparison of alpine habitats and white-tailed ptarmigan occurrence in Colorado and northern Wyoming. *Journal of the Colorado-Wyoming Academy of Science* 7(2): 50.
- King, J. S. and C. E. Braun. 1969. Fall foods of subalpine populations of blue grouse in Colorado. *Journal of the Colorado-Wyoming Academy of Science* 7(2): 52.
- May, T. A. and C. E. Braun. 1969. Observations on winter foods of Colorado white-tailed ptarmigan. *Journal of the Colorado-Wyoming Academy of Science* 7(2): 49-50.

Braun, C. E. 1969. Population dynamics, habitat, and movements of white-tailed ptarmigan in Colorado. Dissertation. Colorado State University, Fort Collins, USA.

Braun, C. E. 1969. Population ecology of white-tailed ptarmigan in Colorado. Transactions of the Central Mountains and Plains Section, The Wildlife Society 14: 12.

1970

Braun, C. E. 1970. Distribution and habitat of white-tailed ptarmigan in Colorado and New Mexico. Proceedings of the Southwestern and Rocky Mountain Division, American Association for the Advancement of Science 46: 35.

May, T. A. and C. E. Braun. 1970. Seasonal trends in the selection of foods by Colorado white-tailed ptarmigan. Transactions of the Central Mountains and Plains Section, The Wildlife Society 15: 20.

Braun, C. E. 1970. The band-tailed pigeon in Colorado: a preliminary report. Transactions of the Central Mountains and Plains Section, The Wildlife Society 15: 21.

Braun, C. E. 1970. The band-tailed pigeon. Colorado Outdoors 19(5): 26-29.

1971

Olsen, O. W. and C. E. Braun. 1971. *Diplotrinaena lagopusi* and *D. andersoni* spp. n. (Diplotrinaenidae: Filarioidea) from white-tailed ptarmigan (*Lagopus leucurus*) in North America. Proceedings of The Helminthological Society of Washington 38: 86-89.

Braun, C. E. and R. K. Schmidt Jr. 1971. Effects of snow and wind on wintering populations of white-tailed ptarmigan in Colorado. Pages 238-250 in A. O. Haugen, Editor. Proceedings of the Snow and Ice Symposium, Iowa State University, Ames, USA.

Braun, C. E. 1971. Investigations of band-tailed pigeons in Colorado. Annual Meeting, Northwest Section, The Wildlife Society 1971: 14.

May, T. A. and C. E. Braun 1971. Seasonal foods of adult white-tailed ptarmigan in Colorado. Annual Meeting, Northwest Section, The Wildlife Society 1971: 16.

Braun, C. E. 1971. Habitat requirements of Colorado white-tailed ptarmigan. Proceedings of the Western Association of the State Game and Fish Commissioners 51: 284-292.

- Braun, C. E. and G. E. Rogers. 1971. The white-tailed ptarmigan in Colorado. Technical Publication 27. Colorado Division of Game, Fish and Parks, Fort Collins, USA.**
- May, T. A. and C. E. Braun. 1971. A working hypothesis for a study of Colorado white-tailed ptarmigan nutrition. Proceedings of the Alaska Science Conference 22: 36.**
- Stabler, R. M., N. J. Kitzmiller, and C. E. Braun. 1971. Hematozoa from 300 Colorado white-tailed ptarmigan, *Lagopus leucurus*. Journal of Protozoology 18(Supplement): 14.**
- Braun, C. E. 1971. Seasonal trends in body fat of white-tailed ptarmigan. Bulletin of the Ecological Society of America 52(2): 44.**
- Braun, C. E. 1971. Bandtails for 1971. Colorado Outdoors 20(5): 40-42.**
- Braun, C. E. 1971. Determination of blue grouse sex and age from wing characteristics. Outdoor Facts, Game Information Leaflet 86. Colorado Division of Wildlife, Fort Collins, USA.**

1972

- White, J. A. and C. E. Braun. 1972. Plumage investigations of Colorado band-tailed pigeons. Joint Annual Meeting, Southwestern and Rocky Mountain Division, American Association for the Advancement of Science and the Colorado-Wyoming Academy of Science. Journal of the Colorado-Wyoming Academy of Science 7(2-3): 70.**
- May, T. A. and C. E. Braun. 1972. Weight dynamics of free-living white-tailed ptarmigan in Colorado. Joint Annual Meeting, Southwestern and Rocky Mountain Division, American Association for the Advancement of Science and the Colorado-Wyoming Academy of Science. Journal of the Colorado-Wyoming Academy of Science 7(2-3): 70-71.**
- Braun, C. E. 1972. Movements and hunting mortality of Colorado band-tailed pigeons. Transactions of the North American Wildlife and Natural Resources Conference 32: 326-334.**
- Braun, C. E. and T. A. May. 1972. Colorado alpine tundra avifaunal investigations, 1966-71. Pages 165-168 in Proceedings 1972 Tundra Biome Symposium, Seattle, Washington, USA.**
- May, T. A. and C. E. Braun. 1972. Seasonal foods of adult white-tailed ptarmigan in Colorado. Journal of Wildlife Management 36: 1180-1186.**

1973

- May, T. A. and C. E. Braun. 1973. Gizzard stones from adult white-tailed ptarmigan (*Lagopus leucurus*) in Colorado. *Arctic and Alpine Research* 5: 49-57.
- Braun, C. E., R. K. Schmidt Jr., and G. E. Rogers. 1973. Census of Colorado white-tailed ptarmigan with tape-recorded calls. *Journal of Wildlife Management* 37: 90-93.
- Stabler, R. M., N. J. Kitzmiller, and C. E. Braun. 1973. *Plasmodium* in a Darwin's tinamou from Colorado. *Journal of Parasitology* 59: 395.
- Braun, C. E. 1973. Distribution and habitats of band-tailed pigeons in Colorado. *Proceedings of the Western Association of State Game and Fish Commissioners* 53: 336-344.
- Hoffman, R. W. and C. E. Braun. 1973. Migration of white-tailed ptarmigan to and from a major wintering area. *Transactions of the Central Mountains and Plains Section, The Wildlife Society* 18: 16-17.
- Braun, C. E. and R. G. Blumberg. 1973. An albinistic blue grouse from Colorado. *Condor* 75: 345-346.

1974

- Braun, C. E. and R. M. Hopper. 1974. Mallard X pintail hybrids in Colorado, 1974. *Colorado Field Ornithologist* 19: 2-3.
- Petersen, B. E. and C. E. Braun. 1974. Observations on the primary feather molt of immature mourning doves in Colorado. *Journal of the Colorado-Wyoming Academy of Science* 7(5): 58.
- Hoffman, R. W. and C. E. Braun. 1974. Composition, distribution, and size of winter flocks of white-tailed ptarmigan. *Journal of the Colorado-Wyoming Academy of Science* 7(5): 68-69.
- Braun, C. E. 1974. Investigations of band-tailed pigeons in Mexico. *Annual Meeting, The Wilson Ornithological Society* 55: 19.
- Stabler, R. M., N. J. Kitzmiller, and C. E. Braun. 1974. Hematozoa from Colorado birds. IV. Galliformes. *Journal of Parasitology* 60: 536-537.

1975

- Braun, C. E. 1975. Mortality, survival and effects of hunting on grouse, partridge,

pheasants and quail. Division Report 3. Colorado Division of Wildlife, Denver, USA.

- Braun, C. E., F. Hamerstrom, T. Ray, and C. M. White. 1975. Conservation Committee report on status of eagles. *Wilson Bulletin* 87: 140-143.
- Hoffman, R. W. and C. E. Braun. 1975. Migration of white-tailed ptarmigan in Colorado. *Journal of the Colorado-Wyoming Academy of Science* 7(6): 45.
- Braun, C. E. 1975. Seasonal habitat selection by white-tailed ptarmigan. Annual Meeting, The Wilson Ornithological Society 56: 14.
- Beck, T. D. I., R. B. Gill, and C. E. Braun. 1975. Sex and age determination of sage grouse from wing characteristics. *Outdoor Facts, Game Information Leaflet* 49. Colorado Division of Game, Fish and Parks, Fort Collins, USA.
- Braun, C. E., R. C. Drewien, C. D. Littlefield, and L. H. Walkinshaw. 1975. Conservation Committee report on status of sandhill cranes. *Wilson Bulletin* 87: 297-302.
- Marti, C. D. and C. E. Braun. 1975. Use of tundra habitats by prairie falcons in Colorado. *Condor* 77: 213-214.
- Hoffman, R. W. and C. E. Braun. 1975. Migration of a wintering population of white-tailed ptarmigan in Colorado. *Journal of Wildlife Management* 39: 485-490.
- Gutiérrez, R. J., C. E. Braun, and T. P. Zapatka. 1975. Reproductive biology of the band-tailed pigeon in Colorado and New Mexico. *Auk* 92: 665-677.
- Stabler, R. M. and C. E. Braun. 1975. Effect of virulent *Trichomonas gallinae* on the band-tailed pigeon. *Journal of Wildlife Diseases* 11: 482-483.
- Hoffman, R. W. and C. E. Braun. 1975. A volunteer wing collection station. *Outdoors Facts, Game Information Leaflet* 101. Colorado Division of Wildlife, Fort Collins, USA.
- Braun, C. E., D. E. Brown, J. C. Pederson, and T. P. Zapatka. 1975. Results of the Four Corners cooperative band-tailed pigeon investigation. U.S. Department of the Interior, Fish and Wildlife Service, Resource Publication 126.
- 1976
- Braun, C. E., M. F. Baker, R. L. Eng, J. S. Gashwiler, and M. H. Schroeder. 1976. Conservation Committee report on effects of alteration of sagebrush communities on the associated avifauna. *Wilson Bulletin* 88: 165-171.

- Braun, C. E., R. W. Hoffman, and G. E. Rogers. 1976. Wintering areas and winter ecology of white-tailed ptarmigan in Colorado. Special Report 38. Colorado Division of Wildlife, Fort Collins, USA.
- Giesen, K. M. and C. E. Braun. 1976. Renesting of white-tailed ptarmigan in Colorado. *Journal of the Colorado-Wyoming Academy of Science* 8(1): 71-72.
- Braun, C. E. 1976. Band-tailed pigeon. Banding Worksheet for Western birds. Western Bird Banding Association. *North American Bird Bander* (Supplement).
- Braun, C. E. 1976. Methods for locating, trapping and banding band-tailed pigeons in Colorado. Special Report 39. Colorado Division of Wildlife, Fort Collins, USA.
- Braun, C. E. 1976. North Park's sage grouse. *Colorado Outdoors* 25(5): 26-28.
- Olsen, O. W. and C. E. Braun. 1976. New species of *Spendidofilaria* and *Chandlerella* (Filarioidea: Nematoda), with keys to the species, from the band-tailed pigeon (*Columba fasciata fasciata*) in the Rocky Mountain region. *Great Basin Naturalist* 36: 445-457.
- 1977
- Stabler, R. M., N. J. Kitzmiller, and C. E. Braun. 1977. Blood parasites from band-tailed pigeons. *Journal of Wildlife Management* 41: 128-130.
- Braun, C. E., W. J. Adrian, and R. E. Keiss. 1977. Mercury residues in Colorado band-tailed pigeons. *Journal of Wildlife Management* 41: 131-134.
- Hoffman, R. W. and C. E. Braun. 1977. Characteristics of a wintering population of white-tailed ptarmigan in Colorado. *Wilson Bulletin* 89: 107-115.
- Braun, C. E. 1977. Autumn structure of sage grouse populations, North Park, Colorado. Joint Annual Meeting of the American Association for the Advancement of Science (143) and the Southwestern and Rocky Mountain Division (53) 77-2: 119.
- Giesen, K. M. and C. E. Braun. 1977. Dispersal and differential movements of immature white-tailed ptarmigan in Colorado. Joint Annual Meeting of the American Association for the Advancement of Science (143) and the Southwestern and Rocky Mountain Division (53) 77-2: 126.
- Jeffrey, R. G., C. E. Braun, D. E. Brown, D. R. Halladay, P. M. Howard, C. E. Kebbe, D. H. Nish, W. A. Smith, and T. P. Zapatka. 1977. Band-tailed pigeon

(Columba fasciata). Pages 210-245 in G. C. Sanderson, Editor. Management of migratory shore and upland game birds in North America. International Association of Fish and Wildlife Agencies, Washington, D.C., USA.

Keeler, J. E., C. C. Allin, J. M. Anderson, S. Gallizioli, K. E. Gamble, D. W. Hayne, W. H. Kiel, Jr., F. W. Martin, J. L. Ruos, K. C. Sadler, L. D. Soileau, C. E. Braun, and H. D. Funk. 1977. Mourning dove (*Zenaida macroura*). Pages 274-298 in G. C. Sanderson, Editor. Management of migratory shore and upland game birds in North America. International Association of Fish and Wildlife Agencies, Washington, D.C., USA.

Braun, C. E. and E. O. Höhn. 1977. Hormones and seasonal plumage colour in ptarmigan (Aves). Proceedings of The Physiological Society of London 1977: 34-35.

Braun, C. E., J. H. Enderson, C. J. Henny, H. Meng, and A. G. Nye, Jr. 1977. Conservation Committee report, Falconry: effects on raptor populations and management in North America. Wilson Bulletin 89: 360-369.

Höhn, E. O. and C. E. Braun. 1977. Seasonal thyroid gland histophysiology and weight in white-tailed ptarmigan. Auk 94: 544-551.

Braun, C. E. 1977. Sage grouse population studies, North Park, Colorado. Transactions of the Western States Sage Grouse Workshop 10: 45.

Braun, C. E. and T. D. I. Beck. 1977. Population dynamics of sage grouse, North Park, Colorado. Transactions of the Central Mountains and Plains Section, The Wildlife Society 22: Abstract.

Braun, C. E., T. Britt, and R. O. Wallestad. 1977. Guidelines for maintenance of sage grouse habitats. Wildlife Society Bulletin 5: 99-106.

Stabler, R. M., C. E. Braun, and T. D. I. Beck. 1977. Hematozoa in sage grouse from Colorado. Journal of Wildlife Diseases 13: 414-417.

Braun, C. E. and W. H. Marshall. 1977. F. John Ward, 1903-1976. Wildlife Society Bulletin 5: 214-215.

1978

Braun, C. E., K. W. Harmon, J. A. Jackson, and C. D. Littlefield. 1978. Management of National wildlife refuges in the United States: its impacts on birds. Wilson Bulletin 90: 309-321.

Beck, T. D. I. and C. E. Braun. 1978. Weights of Colorado sage grouse. Condor 80: 241-243.

- White, J. A. and C. E. Braun. 1978. Age and sex determination of juvenile band-tailed pigeons. *Journal of Wildlife Management* 42: 564-569.
- Olsen, O. W., A. G. Haskins, and C. E. Braun. 1978. *Rhabdometra alpinensis* n.sp. (Cestoda: Paruterinidae: Dilepididea) from southern white-tailed ptarmigan (*Lagopus leucurus altipetens* Osgood) in Colorado, U.S.A., with a key to the species of *Rhabdometra* Cholodkowsky, 1906. *Canadian Journal of Zoology* 56: 446-450.
- Braun, C. E. 1978. Effects of changes in hunting regulations on sage grouse harvest. *Transactions of the Central Mountains and Plains Section, The Wildlife Society* 23: Abstract.
- Hoffman, R. W. and C. E. Braun. 1978. Characteristics and status of ruffed grouse and blue grouse in Colorado. *Western Birds* 9: 121-126.
- Braun, C. E., D. H. Nish, and K. M. Giesen. 1978. Release and establishment of white-tailed ptarmigan in Utah. *Southwestern Naturalist* 23: 661-668.
- 1979
- Braun, C. E., V. H. Reid, T. D. Ray, and R. L. Boyd. 1979. Additional records of white-winged doves in Colorado. *Condor* 81: 96.
- Olson, T. E. and C. E. Braun. 1979. Land use changes and mourning doves. *Journal of the Colorado-Wyoming Academy of Science* 11(1): 95.
- Stabler, R. M. and C. E. Braun. 1979. Effects of a California-derived strain of *Trichomonas gallinae* on Colorado band-tailed pigeons. *California Fish and Game* 65: 56-58.
- Giesen, K. M. and C. E. Braun. 1979. A technique for age determination of juvenile white-tailed ptarmigan. *Journal of Wildlife Management* 43: 508-511.
- Braun, C. E. and R. L. Boyd. 1979. Albinism in mourning doves. *Southwestern Naturalist* 24: 198-200.
- Braun, C. E. 1979. Migration routes of mourning doves west of the Continental Divide in the Central Management Unit. *Wildlife Society Bulletin* 7: 94-97.
- Braun, C. E., F. J. Ward, J. A. White, and R. L. Boyd. 1979. Plumage aberrancies in band-tailed pigeons. *Southwestern Naturalist* 24: 391-393.
- Stabler, R. M., A. G. Haskins, N. J. Kitzmiller, O. W. Olsen, and C. E. Braun. 1979. Two new species of coccidia, *Eimeria leucuri* and *E. oreoecetes* (Protozoa:

- Eimeriidae), in grouse from Colorado. *Journal of Parasitology* 65: 272-274.
- Giesen, K. M. and C. E. Braun. 1979. Nesting behavior of female white-tailed ptarmigan in Colorado. *Condor* 81: 215-217.
- Giesen, K. M. and C. E. Braun. 1979. Renesting of white-tailed ptarmigan in Colorado. *Condor* 81: 217-218.
- Braun, C. E. 1979. Effects of changes in harvest regulations on sage grouse harvest, hunter pressure, and spring population levels. *Transactions of the Western States Sage Grouse Workshop* 11: 14.
- 1980
- Olsen, O. W. and C. E. Braun. 1980. Helminth parasites of band-tailed pigeons in Colorado. *Journal of Wildlife Diseases* 16: 65-66.
- Braun, C. E. 1980. Alpine bird communities of western North America: implications for management and research. Pages 280-291 *in* R. M. DeGraff and N. G. Tilghman, Compilers. *Workshop Proceedings: management of western forests and grasslands for nongame birds*. U.S. Department of Agriculture, Forest Service, General Technical Report INT-86.
- Griese, H. J., R. A. Ryder, and C. E. Braun. 1980. Spatial and temporal distribution of rails in Colorado. *Wilson Bulletin* 92: 96-102.
- Emmons, S. R. and C. E. Braun. 1980. Breeding season movements and habitat selection of male sage grouse in North Park, Colorado. *Journal of the Colorado-Wyoming Academy of Science* 12(1): 36.
- Curtis, P. D. and C. E. Braun. 1980. Evaluation of daily counts of band-tailed pigeons as a census method. *Journal of the Colorado-Wyoming Academy of Science* 12(1): 36-37.
- Petersen, B. E. and C. E. Braun. 1980. Patterns of growth rates and weight gain by juvenile sage grouse. *Journal of the Colorado-Wyoming Academy of Science* 12(1): 43.
- Schoenberg, T. J. and C. E. Braun. 1980. Spring habitat use by male and female sage grouse. *Journal of the Colorado-Wyoming Academy of Science* 12(1): 43-44.
- Giesen, K. M., C. E. Braun, and T. A. May. 1980. Reproduction and nest-site selection by white-tailed ptarmigan in Colorado. *Wilson Bulletin* 92: 188-199.
- Höhn, E. O. and C. E. Braun. 1980. Hormonal induction of feather pigmentation in

ptarmigan. Auk 97: 601-607.

Beck, T. D. I. and C. E. Braun. 1980. The strutting ground count: variation, traditionalism, management needs. Proceedings of the Western Association of Fish and Wildlife Agencies 60: 558-566.

Carpenter, L. H. and C. E. Braun. 1980. A new approach to the dilemma of federal cost-sharing and technical assistance programs that alter wildlife habitat. Transactions of the Central Mountains and Plains Section, The Wildlife Society 25: 13.

1981

Gorenzel, W. P., R. A. Ryder, and C. E. Braun. 1981. American coot response to habitat change on a Colorado marsh. Southwestern Naturalist 26: 59-65.

Gorenzel, W. P., R. A. Ryder, and C. E. Braun. 1981. American coot distribution and migration in Colorado. Wilson Bulletin 93: 115-118.

Kautz, J. E. and C. E. Braun. 1981. Survival and recovery rates of band-tailed pigeons in Colorado. Journal of Wildlife Management 45: 214-218.

Stabler, R. M., N. J. Kitzmiller, and C. E. Braun. 1981. Redescription of *Eimeria centroceri* from sage grouse (*Centrocercus urophasianus*). Transactions of the American Microscopical Society 100: 86-89.

Curtis, P. D. and C. E. Braun. 1981. Band-tailed pigeon behavior at artificial bait sites in Colorado. Journal of the Colorado-Wyoming Academy of Sciences 13(1): 56.

Stabler, R. M., C. E. Braun, and P. D. Curtis. 1981. Bacterial disease in band-tailed pigeons. Journal of the Colorado-Wyoming Academy of Sciences 13(1): 59.

Curtis, P. D. and C. E. Braun. 1981. Direct and coo counts as indices of band-tailed pigeon abundance in Colorado. Annual Meeting, The Cooper Ornithological Society 51: 9.

Braun, C. E. 1981. Tapeworms of birds. Pages 77-80 in W. J. Adrian, Editor. Manual of common wildlife diseases in Colorado. Colorado Division of Wildlife, Denver, USA.

Braun, C. E. 1981. Sage grouse population trends and dynamics in Colorado. Transactions of the Western States Sage Grouse Workshop 12: 4-5.

Giesen, K. M., C. E. Braun, and T. J. Schoenberg. 1981. Techniques for trapping sage grouse in Colorado. Transactions of the Western States Sage Grouse

Workshop 12: 9.

1982

- Gorenzel, W. P., R. A. Ryder, and C. E. Braun. 1982. Reproduction and nest site characteristics of American coots at different altitudes in Colorado. *Condor* 84: 59-65.**
- Giesen, K. M. and C. E. Braun. 1982. Dispersal of juvenile white-tailed ptarmigan in Colorado. Annual Meeting, The Cooper Ornithological Society 52: Abstract 27.**
- Olson, T. E. and C. E. Braun. 1982. September nesting and crop gland activity of mourning doves in Colorado. Annual Meeting, The Cooper Ornithological Society 52: Abstract 60.**
- Braun, C. E., R. A. Ryder, T. E. Olson, and T. J. Schoenberg. 1982. Migratory and upland game birds in northwestern Colorado: the status of our knowledge, 1982. Northwest Colorado Wildlife Consortium, U.S. Department of Interior, Bureau of Land Management, and Colorado Division of Wildlife, Denver, USA.**
- Giesen, K. M., T. J. Schoenberg, and C. E. Braun. 1982. Methods for trapping sage grouse in Colorado. *Wildlife Society Bulletin* 10: 224-231.**
- Autenrieth, R., W. Molini, and C. Braun. 1982. Sage grouse management practices. Technical Bulletin 1. Western States Sage Grouse Committee, Twin Falls, Idaho, USA.**
- Dunks, J. H., R. E. Tomlinson, H. M. Reeves, D. D. Dolton, C. E. Braun, and T. P. Zapatka. 1982. Migration, harvest, and population dynamics of mourning doves banded in the Central Management Unit, 1967-77. U.S. Department of the Interior, Fish and Wildlife Service, Special Scientific Report—Wildlife 249.**

1983

- Olson, T. E., C. E. Braun, and R. A. Ryder. 1983. Cooing activity and nesting of mourning doves in northeastern Colorado. *Southwestern Naturalist* 28: 335-340.**
- Braun, C. E. 1983. Long-term sage grouse population trends, North Park, Colorado. *Transactions of the Western States Sage Grouse Workshop* 13: 8-9.**
- Curtis, P. D. and C. E. Braun. 1983. Radiotelemetry location of nesting band-tailed pigeons in Colorado. *Wilson Bulletin* 95: 464-466.**

Curtis, P. D., C. E. Braun, and R. A. Ryder. 1983. Wing markers: visibility, wear, and effects on survival of band-tailed pigeons. *Journal of Field Ornithology* 54: 381-386.

Curtis, P. D. and C. E. Braun. 1983. Recommendations for establishment and placement of bait sites for counting band-tailed pigeons. *Wildlife Society Bulletin* 11: 364-366.

Braun, C. E. 1983. White-tailed ptarmigan. Page 280 *in* J. Farrand, Jr., Editor. *The Audubon Society Master Guide to Birding*. Volume 1. Alfred A. Knopf, New York, USA.

Braun, C. E. 1983. Sage grouse. Page 284 *in* J. Farrand, Jr., Editor. *The Audubon Society Master Guide to Birding*. Volume 1. Alfred A. Knopf, New York, USA.

Braun, C. E. 1983. Band-tailed pigeon. Pages 138, 140 *in* J. Farrand, Jr., Editor. *The Audubon Society Master Guide to Birding*. Volume 2. Alfred A. Knopf, New York, USA.

1984

Braun, C. E. 1984. Attributes of a hunted sage grouse population in Colorado, U.S.A. Pages 148-162 *in* P. J. Hudson and T. W. I. Lovel, Editors. *Third International Grouse Symposium*, York University, York, United Kingdom.

Braun, C. E. 1984. Biological investigations of white-tailed ptarmigan in Colorado, U.S.A.—a review. Pages 131-147 *in* P. J. Hudson and T. W. I. Lovel, Editors. *Third International Grouse Symposium*, York University, York, United Kingdom.

Hupp, J. W. and C. E. Braun. 1984. Spring changes in lipid reserves of adult male sage grouse. *Journal of the Colorado-Wyoming Academy of Sciences* 16(1): 34.

Emmons, S. R. and C. E. Braun. 1984. Lek attendance of male sage grouse. *Journal of Wildlife Management* 48: 1023-1028.

Olson, T. E. and C. E. Braun. 1984. Mourning dove nesting and crop gland activity during September in eastern Colorado. *Journal of Wildlife Management* 48: 1035-1041.

1985

Profera, J. and C. E. Braun. 1985. Sage grouse public viewing tour development in North Park, Colorado. *Journal of the Colorado-Wyoming Academy of*

Sciences 17(1): 36.

Dunn, P. O. and C. E. Braun. 1985. Natal dispersal and lek fidelity of sage grouse. *Auk* 102: 621-627.

Braun, C. E. 1985. The Cold Spring Mountain, Colorado controversy: a case history. *Transactions of the Western States Sage Grouse Workshop* 14: 2.

Braun, C. E. and T. D. I. Beck. 1985. Effects of changes in hunting regulations on sage grouse harvest and populations. Pages 335-343 *in* S. L. Beasom and S. F. Roberson, Editors. *Game Harvest Management. Proceedings of the Third International Symposium*, Caesar Kleberg Research Institute, Kingsville, Texas, USA.

Remington, T. E. and C. E. Braun. 1985. Sage grouse food selection in winter, North Park, Colorado. *Journal of Wildlife Management* 49: 1055-1061.

1986

Dunn, P. O. and C. E. Braun. 1986. Late summer-spring movements of juvenile sage grouse. *Wilson Bulletin* 98: 83-92.

Profera, J. and C. E. Braun. 1986. Development of sage grouse public viewing tours in North Park, Colorado. *Proceedings, Issues and Technology in the Management of Impacted Western Wildlife* 2: 306.

Braun, C. E. 1986. Changes in sage grouse lek counts with advent of surface coal mining. *Proceedings, Issues and Technology in the Management of Impacted Western Wildlife* 2: 227-231.

Dunn, P. O. and C. E. Braun. 1986. Summer habitat use by adult female and juvenile sage grouse. *Journal of Wildlife Management* 50: 228-235.

Braun, C. E. and K. M. Giesen. 1986. Population characteristics of white-tailed ptarmigan in Colorado. *Conference on Science in the National Parks—1986*. U.S. Department of the Interior, National Park Service, and Colorado State University, Fort Collins, USA.

Braun, C. E. 1986. Book Review: Lehmann, V. W. 1984. *Bobwhites in the Rio Grande Plain of Texas*. Texas A & M Press, College Station, USA. *Wilson Bulletin* 98: 492-493.

Braun, C. E. 1986. Reflections on twenty years of grouse research. *Annual Technical Session, Nebraska Chapter, The Wildlife Society* 4: Abstract.

1987

Graham, M. A. and C. E. Braun. 1987. Changes in territory size of white-tailed ptarmigan. Journal of the Colorado-Wyoming Academy of Science 19(1): 20.

Braun, C. E. 1987. Are sage grouse cyclic? Transactions of the Western States Sage Grouse Workshop 15: 18.

Braun, C. E. 1987. Current issues in sage grouse management. Proceedings of the Western Association of Fish and Wildlife Agencies 67: 134-144.

Kitzmiller, N. J. and C. E. Braun. 1987. In Memoriam: Robert M. Stabler, 1904-1985. Journal of Parasitology 73: 679.

Braun, C. E. 1987. Occurrence and distribution of white-tailed ptarmigan in Wyoming. Annual Meeting, Wyoming Chapter, The Wildlife Society 1987: 15.

1988

Remington, T. E. and C. E. Braun. 1988. Carcass composition and energy reserves of sage grouse during winter. Condor 90: 15-19.

Braun, C. E. 1988. Occurrence and distribution of white-tailed ptarmigan in Wyoming. Journal of the Colorado-Wyoming Academy of Science 20(1): 10.

1989

Hupp, J. W. and C. E. Braun. 1989. Endogenous reserves of adult male sage grouse during courtship. Condor 91: 266-271.

Braun, C. E. 1989. Impacts of reduced bag limits on sage grouse harvest and lek counts. Transactions of the Western States Sage and Sharp-tailed Grouse Workshop 16: 20.

Hupp, J. W. and C. E. Braun. 1989. Topographic distribution of sage grouse foraging in winter. Journal of Wildlife Management 53: 823-829.

Schmutz, J. A. and C. E. Braun. 1989. Reproductive performance of Rio Grande wild turkeys. Condor 91: 675-680.

Schmutz, J. A., C. E. Braun, and W. F. Andelt. 1989. Nest habitat use of Rio Grande wild turkeys. Wilson Bulletin 101: 591-598.

1990

- Braun, C. E. 1990. Book Review: Bergerud, A. T., and M. W. Gratson. 1988. Adaptive strategies and population ecology of northern grouse. University of Minnesota Press, Minneapolis, USA. Wilson Bulletin 102: 191-192.**
- Braun, C. E. 1990. Summary remarks. Transactions of the North American Wildlife and Natural Resources Conference 55: 633-634.**
- White, J. A. and C. E. Braun. 1990. Growth of young band-tailed pigeons in captivity. Southwestern Naturalist 35: 82-84.**
- Hoag, A. W. and C. E. Braun. 1990. Status and distribution of Plains sharp-tailed grouse. Prairie Naturalist 22: 97-102.**
- Braun, C. E. 1990. Effects of regulations on sage grouse harvest and population size. Transactions of the Central Mountains and Plains Section, The Wildlife Society 35:Abstract.**
- Schmutz, J. A., C. E. Braun, and W. F. Andelt. 1990 Brood habitat use of Rio Grande wild turkeys. Prairie Naturalist 22: 177-184.**
- Van Sant, B. F. and C. E. Braun. 1990. Distribution and status of greater prairie-chickens in Colorado. Prairie Naturalist 22: 225-230.**

1991

- Olson, T. E., C. E. Braun, and R. A. Ryder. 1991. Agricultural land use and mourning doves in eastern Colorado: implications for nesting and production in the Great Plains. Prairie Naturalist 23: 1-10.**
- Braun, C. E., D. R. Stevens, K. M. Giesen, and C. P. Melcher. 1991. Elk, white-tailed ptarmigan and willow relationships: a management dilemma in Rocky Mountain National Park. Transactions of the North American Wildlife and Natural Resources Conference 56: 74-85.**
- Hupp, J. W. and C. E. Braun. 1991. Geographic variation among sage grouse in Colorado. Wilson Bulletin 103: 255-261.**
- Braun, C. E., Editor. 1991. Mountain Lion—Human Interaction Symposium and Workshop Proceedings. Colorado Division of Wildlife, Denver, USA.**
- George, J. L., C. E. Braun, R. A. Ryder, and E. Decker. 1991. Response of waterbirds to experimental disturbances. Proceedings, Issues and Technology in the Management of Impacted Western Wildlife 5: 52-59.**

Benson, L. A., C. E. Braun, and W. C. Leininger. 1991. Sage grouse response to burning in the big sagebrush type. Proceedings, Issues and Technology in the Management of Impacted Western Wildlife 5: 97-104.

Remington, T. E. and C. E. Braun. 1991. How surface coal mining affects sage grouse, North Park, Colorado. Proceedings, Issues and Technology in the Management of Impacted Western Wildlife 5: 128-132.

Schroeder, M. A. and C. E. Braun. 1991. Walk-in traps for capturing greater prairie-chickens on leks. Journal of Field Ornithology 62: 378-385.

Braun, C. E. 1991. Distribution and status of sage grouse in Colorado. Transactions of the Western States Sage and Sharp-tailed Grouse Workshop 17: Abstract.

1992

Schroeder, M. A. and C. E. Braun. 1992. Seasonal movement and habitat use by greater prairie-chickens in northeastern Colorado. Special Report 68. Colorado Division of Wildlife, Fort Collins, USA.

Beauprez, G. M., J. A. Clarke, and C. E. Braun. 1992. Movements, reproductive success, and habitat use by introduced greater prairie-chickens. Journal of the Colorado-Wyoming Academy of Science 24(1): 12.

Schroeder, M. A., K. M. Giesen, and C. E. Braun. 1992. Use of helicopters for estimating numbers of greater and lesser prairie-chickens leks in eastern Colorado. Wildlife Society Bulletin 20: 106-113.

Giesen, K. M. and C. E. Braun. 1992. Winter home range and habitat characteristics of white-tailed ptarmigan in Colorado. Wilson Bulletin 104: 263-272.

Schroeder, M. A. and C. E. Braun. 1992. Greater prairie-chicken attendance at leks and stability of leks in Colorado. Wilson Bulletin 104: 273-284.

Hoffman, R. W., W. D. Snyder, G. C. Miller, and C. E. Braun. 1992. Reintroduction of greater prairie-chickens in northeastern Colorado. Prairie Naturalist 24: 197-204.

1993

Schroeder, M. A. and C. E. Braun. 1993. Partial migration in a population of greater prairie-chickens in northeastern Colorado. Auk 110: 21-28.

Giesen, K. M. and C. E. Braun. 1993. Natal dispersal and recruitment of juvenile white-tailed ptarmigan in Colorado. Journal of Wildlife Management

57: 72-77.

- Schroeder, M. A. and C. E. Braun. 1993. Movement and philopatry of band-tailed pigeons in Colorado. *Journal of Wildlife Management* 57: 103-112.
- Giesen, K. M. and C. E. Braun. 1993. Considerations for reintroduction of sharp-tailed grouse in Colorado. *Transactions of the Joint Meeting of the Prairie Grouse Technical Council and the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 1: Abstract.
- Braun, C. E. 1993. The status of sage grouse: are they endangered, threatened, or? *Transactions of the Joint Meeting of the Prairie Grouse Technical Council and the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 1: Abstract.
- Beauprez, G. M., J. A. Clarke, and C. E. Braun. 1993. Reintroduction of greater prairie-chickens in northeastern Colorado. *Transactions of the Joint Meeting of the Prairie Grouse Technical Council and the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 1: Abstract.
- Brown, D. E., A. Sands, S. Clubine, and C. E. Braun. 1993. Strategic plan for quail management and research in the United States: issues and strategies—grazing and range management. Pages 176-177 *in* K. E. Church and T. V. Dailey, Editors. *Quail III: national quail symposium*. Kansas Department of Wildlife and Parks, Pratt, USA.
- Giesen, K. M. and C. E. Braun. 1993. Status and distribution of Columbian sharp-tailed grouse in Colorado. *Prairie Naturalist* 25: 237-242.
- Braun, C. E. 1993. White-tailed ptarmigan habitat investigations in northeast Oregon. *Oregon Birds* 19(3): 72-73.
- Braun, C. E., K. Martin, and L. A. Robb. 1993. White-tailed ptarmigan. Number 68 *in* A. Poole and F. Gill, Editors. *The birds of North America*. The Academy of Natural Sciences, Philadelphia, Pennsylvania and The American Ornithologists' Union, Washington, D.C., USA.
- Braun, C. E., N. J. Silvy, T. S. Baskett, and R. E. Tomlinson. 1993. Research and management needs. Pages 507-513 *in* T. S. Baskett, M. W. Sayre, R. E. Tomlinson, and R. E. Mirarchi, Compilers and Editors. *Ecology and management of the mourning dove*. Stackpole Books, Harrisburg, Pennsylvania, USA.

1994

- Braun, C. E., K. M. Giesen, R. W. Hoffman, T. R. Remington, and W. D. Snyder.

1994. Upland bird management analysis guide, 1994-1998. Division Report 19. Colorado Division of Wildlife, Fort Collins, USA.
- Braun, C. E., K. Martin, T. E. Remington, and J. R. Young. 1994. North American grouse: issues and strategies for the 21st century. Transactions of the North American Wildlife and Natural Resources Conference 59: 428-438.
- Braun, C. E. 1994. Historic and present distribution and status of sage grouse in Colorado. Proceedings of the Southwestern and Rocky Mountain Division, American Association for the Advancement of Science and the Colorado-Wyoming Academy of Science 26(1): 30.
- Braun, C. E. 1994. Northern goshawk and southwestern forest management: a review. Annual Meeting, The American Ornithologists' Union 112: Abstract.
- Quinn, T. W., N. W. Kahn, J. R. Young, C. E. Braun, and M. Sarel. 1994. Biogeographic distribution of mtDNA control region haplotypes in sage grouse. Journal für Ornithologie 135: 350.
- Braun, C. E. 1994. Artificial enhancement of abandoned and new sage grouse leks. Western States Sage and Columbian Sharp-tailed Grouse Workshop 19: 16.
- Young, J. R., J. W. Hupp, J. W. Bradbury, and C. E. Braun. 1994. Phenotypic divergence of secondary sexual traits among sage grouse, *Centrocercus urophasianus*, populations. Animal Behavior 47: 1353-1362.
- Braun, C. E. 1994. Band-tailed pigeon. Pages 60-74 in T. C. Tacha and C. E. Braun, Editors. Migratory shore and upland game bird management in North America. International Association of Fish and Wildlife Agencies, Washington, D.C., USA.
- Tacha, T. C., C. E. Braun, and R. E. Tomlinson. 1994. Migratory shore and upland game bird resources—status and needs. Pages 219-223 in T. C. Tacha and C. E. Braun, Editors. Migratory shore and upland game bird management in North America. International Association of Fish and Wildlife Agencies, Washington, D.C., USA.
- Tacha, T. C. and C. E. Braun, Editors. 1994. Migratory shore and upland game bird management in North America. International Association of Fish and Wildlife Agencies, Washington, D.C., USA.
- Braun, C. E. 1994. Book Review: Howman, K. 1993. Pheasants of the world. Their breeding and management. Hancock House Publishers Ltd., Surrey, United Kingdom and Blaine, Washington, USA. Auk 111: 1029-1030.

1995

- Braun, C. E. 1995. Distribution and status of sage grouse in Colorado. *Prairie Naturalist* 27: 1-9.**
- Commons, M. L., D. L. Rieden, and C. E. Braun. 1995. Sage grouse investigations in Dove Creek, Dolores County, Colorado. *Journal of the Colorado-Wyoming Academy of Science* 27(1): 24.**
- Braun, C. E. and J. R. Young. 1995. A new species of sage grouse from Colorado. Abstract # 23. Joint Meeting of The Wilson Ornithological Society and The Virginia Society of Ornithology, Williamsburg, Virginia, USA.**
- Schulz, J. H., S. L. Sheriff, Z. He, C. E. Braun, R. D. Drobney, R. E. Tomlinson, D. D. Dolton, and R. A. Montgomery. 1995. Accuracy of techniques used to assign mourning dove age and gender. *Journal of Wildlife Management* 59: 759-765.**

1996

- Braun, C. E., J. H. Enderson, M. R. Fuller, Y. B. Linhart, and C. D. Marti. 1996. Northern goshawk and forest management in the southwestern United States. Technical Review 96-2. The Wildlife Society, Bethesda, Maryland, USA.**
- Braun, C. E. and T. D. I. Beck. 1996. Effects of research on sage grouse management. *Transactions of the North American Wildlife and Natural Resources Conference* 61: 429-436.**
- Braun, C. E. 1996. Memorandum of Understanding among members of Western Association of Fish and Wildlife Agencies. Conservation and management of sage grouse in North America. *Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 20: Abstract.**
- Braun, C. E. 1996. Conservation planning for the Gunnison sage grouse. *Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 20: Abstract.**
- Commons, M. L., R. K. Baydack, and C. E. Braun. 1996. Movements and habitat use by Gunnison's sage grouse in southwestern Colorado. *Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 20: Abstract.**
- Oyler, S. J., C. E. Braun, and K. P. Burnham. 1996. Development of a habitat-based model to predict sage grouse use in southwestern Colorado. *Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop* 20:**

Abstract.

- Quinn, T. W., J. Young, and C. E. Braun. 1996. A genetic profile of Gunnison (small-bodied) and other sage grouse populations constructed using mitochondrial and nuclear genetic markers. Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 20: Abstract.**
- Schroeder, M. A. and C. E. Braun. 1996. Relationship between lek counts and the previous year's breeding success in populations of sage grouse. Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 20: Abstract.**
- Braun, C. E. 1996. Status of prairie grouse in North America. International Grouse Symposium 7: Abstract.**
- Commons, M. L., R. K. Baydack, and C. E. Braun. 1996. Sage grouse movement and habitat use in southwestern Colorado. Annual Conference, The Wildlife Society 3: 62.**
- Lancia, R. A., C. E. Braun, M. W. Collopy, R. D. Dueser, J. G. Kie, C. J. Martinka, J. D. Nichols, T. D. Nudds, W. R. Porath, and N. G. Tilghman. 1996. ARM! For the future: adaptive resource management in the wildlife profession. Wildlife Society Bulletin 24: 436-442.**
- 1997**
- Braun, C. E. 1997. Identification of Utah's sage grouse taxa. Annual Meeting, Utah Chapter, The Wildlife Society 1997: 3.**
- Braun, C. E. 1997. The status of sage grouse in southeast Utah and southwestern Colorado. Annual Meeting, Utah Chapter, The Wildlife Society 1997: 15-16.**
- Braun, C. E. 1997. Long-term monitoring of montane species: white-tailed ptarmigan, 1966-96. Annual Conference, The Western Section, The Wildlife Society. Abstract: 4.**
- Connelly, J. W. and C. E. Braun. 1997. Long-term changes in sage grouse *Centrocercus urophasianus* populations in western North America. Wildlife Biology 3: 229-234.**
- Oyler, S. J. and C. E. Braun. 1997. Use of a habitat-based model to predict sage grouse *Centrocercus urophasianus* occupancy of patches in southwestern Colorado. Wildlife Biology 3: 282.**
- Commons, M. L., R. K. Baydack, and C. E. Braun. 1997. Gunnison sage grouse *Centrocercus minimus* use of fragmented habitats in southwestern Colorado.**

Wildlife Biology 3: 283.

Quinn, T. W., N. W. Kahn, J. R. Young, N. G. Benedict, S. Wood, D. Mata, and C. E. Braun. 1997. Probing the evolutionary history of sage grouse *Centrocercus urophasianus* populations using mitochondrial DNA sequence. Wildlife Biology 3: 291.

Martin, K., P. B. Stacey, and C. E. Braun. 1997. Demographic rescue and maintenance of population stability in grouse – beyond metapopulations. Wildlife Biology 3: 295-296.

1998

Hagen, C. A., R. Baydack, C. E. Braun, N. C. Kenkel, and D. Sexton. 1998. Habitat use and movements of a fragmented population of northern sage grouse in northwestern Colorado. Proceedings of the Prairie Grouse Technical Council 22: Abstract.

Hagen, C. A., R. K. Baydack, and C. E. Braun. 1998. Movements of sage grouse in a fragmented landscape of northwestern Colorado. Proceedings of the Southwestern and Rocky Mountain Division, American Association for the Advancement of Science. 38 (1): 35.

Braun, C. E. 1998. Sage grouse declines in western North America: what are the problems? Proceedings of the Western Association of Fish and Wildlife Agencies 78: 139-156.

Hagen, C. A., R. K. Baydack, and C. E. Braun. 1998. Sage grouse in disturbed vs. naturally fragmented landscapes. Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 21: 8.

Braun, C. E. 1998. Conservation planning for sage grouse in Colorado, Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 21: 11.

Oyler-McCance, S. J., N. W. Kahn, C. E. Braun, and T. W. Quinn. 1998. Population genetics of Colorado sage grouse: implications for conservation. Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 21: 17.

Hagen, C. A., R. K. Baydack, and C. E. Braun. 1998. Sage grouse habitat use of a fragmented landscape in northwestern Colorado. Annual Conference, The Wildlife Society 5: 91.

Oyler-McCance, S. J., N. W. Kahn, C. E. Braun, and T. W. Quinn. 1998. Genetic support for a proposed new species of sage grouse in Colorado. Annual

Conference, The Wildlife Society 5: 122.

1999

- Commons, M. L., R. K. Baydack, and C. E. Braun. 1999. Sage grouse response to pinyon-juniper management. Pages 238-239 in Proceedings: ecology and management of pinyon-juniper communities within the Interior West (S. B. Monsen and R. Stevens, Compilers). USDA, Forest Service, RMRS-P-9. Rocky Mountain Research Station, Ogden, Utah, USA.**
- Johnson, K. H. and C. E. Braun. 1999. Viability and conservation of an exploited sage grouse population. Conservation Biology 13: 77-84.**
- Braun, C. E. 1999. Status of Gunnison vs. Northern sage grouse. Annual Meeting, Utah Chapter, The Wildlife Society 1999: Abstract.**
- Braun, C. E. 1999. Management strategies for conservation of sage grouse. Annual Meeting, Utah Chapter, The Wildlife Society 1999: Abstract.**
- Kahn, N. W., C. E. Braun, J. R. Young, S. Wood, D. R. Mata, and T. W. Quinn. 1999. Molecular analysis of genetic variation among large- and small-bodied sage grouse using mitochondrial control-region sequences. Auk 116: 819-824.**
- Oyler-McCance, S. J., N. W. Kahn, K. P. Burnham, C. E. Braun, and T. W. Quinn. 1999. A population genetic comparison of large- and small-bodied sage grouse in Colorado using microsatellite and mitochondrial DNA markers. Molecular Ecology 8: 1457-1465.**
- Hagen, C. A., N. C. Kenkel, R. K. Baydack, and C. E. Braun. 1999. Fractal-based spatial analysis of telemetry data. Annual Conference, The Wildlife Society 6: 111.**
- Oyler-McCance, S. J., C. E. Braun, K. P. Burnham, and T. W. Quinn. 1999. Population genetics of Gunnison sage grouse in Colorado: implications for management. Annual Conference, The Wildlife Society 6: 160-161.**
- Braun, C. E. 1999. American woodcock in Colorado. Prairie Naturalist 31: 141-144.**
- Schroeder, M. A., J. R. Young, and C. E., Braun. 1999. Sage grouse. Number 425 in Poole and F. Gill, Editors. The birds of North America. The Birds of North America, Inc., Philadelphia, Pennsylvania, USA.**
- Potter, K. M. and C. E. Braun 1999. Sage grouse investigations, Middle Park, Colorado, April-September 1999. Colorado Division of Wildlife, Fort Collins, USA.**

2000

- Nehring, J. A. and C. E. Braun. 2000. Gunnison sage grouse investigations, Poncha Pass Area, Colorado, April-December 1999. Colorado Division of Wildlife, Fort Collins, USA.**
- Braun, C. E. and J. W. Connelly. 2000. Sage grouse habitat requirements and sagebrush management. Annual Meeting, Society of Range Management, Boise, Idaho, USA. 53: 69 (Abstract).**
- Kautz, J. E. and C. E. Braun. 2000. Studies of band-tailed pigeons in Colorado. I. Feasibility of estimating band-tailed pigeon population parameters using capture-recapture. Special Report 75. Colorado Division of Wildlife, Fort Collins, USA.**
- Curtis, P. D. and C. E. Braun. 2000. Studies of band-tailed pigeons in Colorado. II. Behavior of band-tailed pigeons at feeding sites. Special Report 75. Colorado Division of Wildlife, Fort Collins, USA.**
- Braun, C. E. 2000. Sage grouse and the status and future of sagebrush-steppe ecosystems. Annual Meeting, Northwest Section, The Wildlife Society 2000: 31.**
- VanDyke, W., G. P. Keister Jr., and C. E. Braun. 2000. Population characteristics of Northern sage grouse in Oregon and Colorado. Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 22: Abstract.**
- Commons, M. L. and C. E. Braun. 2000. Movements of Gunnison sage grouse in southwestern Colorado. Transactions of the Western States Sage and Columbian Sharp-tailed Grouse Workshop 22: Abstract.**
- Martin, K., P. B. Stacey, and C. E. Braun. 2000. Recruitment, dispersal, and demographic rescue in spatially-structured white-tailed ptarmigan populations. Condor 102: 503-516.**
- Keppie, D. M. and C. E. Braun. 2000. Band-tailed pigeon. Number 530 in A. Poole and F. Gill, Editors. The birds of North America. The Birds of North America, Inc., Philadelphia, Pennsylvania, USA.**
- Young, J. R., C. E. Braun, S. J. Oyler-McCance, J. W. Hupp, and T. W. Quinn. 2000. A new species of sage-grouse (Phasianidae: *Centrocercus*) from southwestern Colorado. Wilson Bulletin 112: 445-453.**
- Connelly, J. W., M. A. Schroeder, A. R. Sands, and C. E. Braun. 2000. Guidelines to manage sage-grouse populations and their habitats. Wildlife Society Bulletin**

28: 967-985.

2001

- Hemker, T. P. and C. E. Braun. 2001. Innovative approaches for development of conservation plans for sage grouse: examples from Idaho and Colorado. Transactions of the North American Wildlife and Natural Resources Conference 66: 456-463.**
- Braun, C. E. 2001. Implementation of the revised sage grouse guidelines: a win-win situation. Proceedings of the Annual Meeting of the Western Section of The Wildlife Society 21: 11.**
- Hagen, C. A., N. C. Kenkel, D. J. Walker, R. K. Baydack, and C. E. Braun. 2001. Fractal-based spatial analysis of radiotelemetry data. Pages 167-187 in J. J. Millspaugh and J. M. Marzluff, Editors. Radio tracking and animal populations. Academic Press, San Diego, California, USA.**
- Oyler-McCance, S. J., K. P. Burnham, and C. E. Braun. 2001. Modeling management and conservation strategies for Gunnison sage grouse in Colorado. Pages 305-307 in R. Field, R. Warren, H. Okarma, and P. Sievert, Editors. Wildlife, land, and people: priorities for the 21st century. Proceedings of the Second International Wildlife Management Congress. The Wildlife Society, Bethesda, Maryland, USA.**
- Oyler-McCance, S. J., K. P. Burnham, and C. E. Braun. 2001. Influence of changes in sagebrush on Gunnison sage grouse in southwestern Colorado. Southwestern Naturalist 46: 323-331.**
- Braun, C. E. 2001. Alpine ecosystems in western North America. Annual Conference, The Wildlife Society 8: 87.**
- Braun, C. E. 2001. Cows, coyotes, and corvids: the politics of sage-grouse management. Annual Conference, The Wildlife Society 8: 87-88.**
- Braun, C. E., 2001. Changes in distribution, abundance, and status of sage-grouse. Annual Conference, The Wildlife Society 8: 88.**
- Braun, C. E. and R. W. Brown. 2001. Rehabilitation of alpine ecosystems: can we mend the meadows? Annual Conference, The Wildlife Society 8: 88-89.**
- Braun, C. E. 2001. Sage-grouse habitat relationships: a review of what is known. 10 pages in Proceedings of the First Symposium of The Thunder Basin Grasslands Prairie Ecosystem Association. Casper, Wyoming, USA.**
- Braun, C. E. 2001. Conservation and management of lesser prairie-chickens: the**

need for a coordinated approach. Proceedings of the Prairie Grouse Technical Council 24: 26-27.

Braun, C. E. and K. Martin. 2001. Unusual summer plumage of white-tailed ptarmigan. Wilson Bulletin 113: 373-377.

2002

Braun, C. E., O. O. Oedekoven, and C. L. Aldridge. 2002. Oil and gas development in western North America: effects on sagebrush steppe avifauna with particular emphasis on sage grouse. Transactions of the North America Wildlife and Natural Resources Conference 67: 337-349.

Braun, C. E. 2002. Federal land management and prairie grouse. Annual Conference, The Wildlife Society 9: 80.

Wamboldt, C. L., A. J. Harp, B. L. Welch, N. Shaw, J. W. Connelly, K. P. Reese, C. E. Braun, D. A. Klebenow, E. D. McArthur, J. G. Thompson, L. A. Torell, and J. A. Tanaka. 2002. Conservation of greater sage-grouse on public lands in the western U.S.: implications of recovery and management policies. Policy Analysis Center for Western Public Lands, PACWPL Policy Paper SG-02-02.

Wang, G., N. T. Hobbs, K. M. Giesen, H. Galbraith, D. S. Ojima, and C. E. Braun. 2002. Relationships between climate and population dynamics of white-tailed ptarmigan *Lagopus leucurus* in Rocky Mountain National Park, Colorado, USA. Climate Research 23: 81-87

2003

Braun, C. E., R. J. Delpiccolo, R. W. Hoffman, and T. E. Remington. 2003. First specimen records for ruffed grouse in Colorado. Western North American Naturalist 63: 105-107.

Zablan, M. A., C. E. Braun, and G. C. White. 2003. Estimation of greater sage-grouse survival in North Park, Colorado. Journal of Wildlife Management 67: 144-154.

Benedict, N. G., S. J. Oyler-McCance, S. E. Taylor, C. E. Braun, and T. W. Quinn. 2003. Evaluation of the eastern (*Centrocercus urophasianus urophasianus*) and western (*Centrocercus urphasianus phaios*) subspecies of sage-grouse using mitochondrial control-region sequence data. Conservation Genetics 4: 301-310.

2004

Schroeder, M. A., C. L. Aldridge, A. D. Apa, J. R. Bohne, C. E. Braun, S. D.

Bunnell, J. W. Connelly, P. A. Deibert, S. C. Gardner, M. A. Hilliard, G. D. Kobriger, S. M. McAdam, C. W. McCarthy, J. J. McCarthy, D. L. Mitchell, E. V. Rickerson, and S. J. Stiver. 2004. Distribution of sage-grouse in North America. *Condor* 106: 363-376.

Braun, C. E. 2004. Wild turkeys and biologist tales. Book Review: Shaw, H. G. 2004. *Stalking the big bird: a tale of turkeys, biologists, and bureaucrats*. University Press, Tucson, USA. *Prairie Naturalist* 36: 194.

Braun, C. E., J. R. Young, K. M. Potter, M. L. Commons Kemner, and J. A. Nehring. 2004. Historical distribution of Gunnison sage-grouse in Colorado. Annual Conference, The Wildlife Society 11: Abstract.

Strohm, K. M., G. C. White, and C. E. Braun. 2004. Modeling sage grouse population change: an alternative to lek counts. Annual Conference, The Wildlife Society 11: Abstract.

2005

Braun, C. E., Editor. 2005. Techniques for wildlife investigations and management. Sixth Edition. The Wildlife Society, Bethesda, Maryland, USA.

Braun, C. E., J. W. Connelly, and M. A. Schroeder. 2005. Seasonal habitat requirements for sage-grouse: spring, summer, fall, and winter. Pages 38-42 *in* N. L. Shaw, M. Pellant, and S. B. Monsen. 2005. Sage-grouse habitat restoration symposium proceedings; 4-7 June 2001, Boise, Idaho. U.S. Department of Agriculture, Forest Service, RMRS-P-38.

Braun, C. E. 2005. Multi-species benefits of the proposed North American Sage-grouse Management Plan. Pages 1162-1164 *in* Ralph, C. J. and T. D. Rich, Editors. Bird Conservation Implementation and Integration in the Americas: Proceedings of the Third International Partners in Flight Conference. March 20-24, 2002, Asilomar, California. U.S. Department of Agriculture, Forest Service, General Technical Report PSW-GTR-191.

Skalski, J. R., K. E. Ryding, and J. J. Millspaugh. 2005. Wildlife demography: analysis of sex, age, and count data. (C. E. Braun, Contract Technical Editor). Elsevier Academic Press, Boston, Massachusetts, USA.

2006

Schroeder, M. A., J. W. Connelly, C. L. Wambolt, C. E. Braun, C. A. Hagen, and M. R. Frisina. 2006. Society for Range Management Issue Paper: Ecology and management of sage-grouse and sage-grouse habitat-a reply. *Rangelands* 28: 3-7.

Braun, C. E. and J. R. Young. 2006. The politics of ‘managing’ a new species: the Gunnison sage-grouse, 1977-2006. Western Agencies Sage and Columbian Sage and Columbian Sharp-tailed Grouse Technical Committee Meeting 25: Abstract.

Hagen, C. A., D. A. Budeau, and C. E. Braun. 2006. What can we learn from Oregon Greater sage-grouse wing-bees? Western Agencies Sage and Columbian Sharp-tailed Grouse Technical Committee Meeting 25: Abstract.

2007

Connelly, J. W. and C. E. Braun. 2007. In our opinion: measuring success of sage-grouse conservation plans. Grouse News 33: 4-6.

Johnson, D. H., C. E. Braun, and M. A. Schroeder. 2007. The bounded-count method for analysis of lek counts. Pages 25-30 *in* Monitoring populations of sage-grouse (K. P. Reese and R. T. Bowyer, Editors). Experiment Station Bulletin 88. College of Natural Resources, University of Idaho, Moscow, USA.

Schroeder, M. A., C. E. Braun, and J. W. Connelly. 2007. Effects of wind power development on sage-grouse. Pages 28-31 *in* Proceedings of the NWCC Wildlife Workshop Research Planning Meeting VI (S. S. Schwartz, Editor). San Antonio, Texas, 14-15 November 2006. RESOLVE, Inc. Washington D.C., USA

2008

Braun, C. E. 2008. Studies of native Columbiformes in Tucson, Arizona, 2008. Webless Migratory Game Bird Research Program Project Abstracts. USDI, Fish and Wildlife Service, Division of Migratory Bird Management, Denver, Colorado, USA.

2009

Braun, C. E. 2009. Long-term trends: White-tailed Ptarmigan. Annual Conference, The Wildlife Society 16: Abstract.

2010

Kaler, R. S. A., S. E. Ebbert, C. E. Braun, and B. A. Sandercock. 2010. Demography of a reintroduced population of Evermann’s Rock Ptarmigan in the Aleutian Islands. Wilson Journal of Ornithology 122: 1-14.

Braun, C. E. 2010. Review of: Flake, L. D., J. W. Connelly, T. R. Kirschenmann,

and A. J. Lindbloom. 2010. Grouse of plains and mountains: the South Dakota story. South Dakota Game, Fish and Parks, Pierre. *Wilson Journal of Ornithology* 122: 628-629.

Sedinger, J. S., G. C. White, S. Espinosa, E. T. Partee, and C. E. Braun. 2010. Assessing compensatory versus additive harvest mortality: an example using Greater Sage-Grouse. *Journal of Wildlife Management* 74:326-332.

2011

Braun, C. E., W. P. Taylor, S. E. Ebbert, R. S. A. Kaler, and B. K. Sandercock. 2011. Protocols for successful translocations of ptarmigan. *Proceedings of the Conference: Gyrfalcons and ptarmigan in a changing world. Volume II: 339-348.*

Braun, C. E. and K. C. Jensen. 2011. Overview of status and conservation concerns for Prairie Grouse in North America. Joint Meeting of AFO, COS, and WOS, Kearney, Nebraska. Abstract.

Braun, C. E. 2011. Review: Knick, S. T. and J. W. Connelly, Editors. 2011. Greater Sage-Grouse: ecology and conservation of a landscape species. *Studies in Avian Biology Number 38. Wilson Journal of Ornithology* 123: 654-656.

Connelly, J. W., E. T. Rinkes, and C. E. Braun. 2011. Characteristics of Greater Sage-Grouse habitats: a landscape species at micro- and macroscales. *Studies in Avian Biology* 38: 69-83.

Connelly, J. W., S. T. Knick, C. E. Braun, W. L. Baker, E. A. Beever, T. J. Christiansen, K. E. Doherty, E. O. Garton, S. E. Hanser, D. H. Johnson, M. Leu, R. F. Miller, D. E. Naugle, S. J. Oyler-McCance, D. A. Pyke, K. P. Reese, M. A. Schroeder, S. J. Stiver, B. L. Walker, and M. J. Wisdom. 2011. Conservation of Greater Sage-Grouse: a synthesis of current trends and future management. *Studies in Avian Biology* 38: 549-563.

Gill Jr., R. E., D. W. Anderson, C. E. Braun, E. S. Bridge, W. S. Clark, B. Eichhorst, J. Evens, D. C. Evers, F. E. Hayes, A. Jaramillo, I. L. Jones, and K. D. Richkus. 2011. Review: Pyle, P. 2008. Identification guide to North American birds. Part II. Anatidae to Alcidae. Slate Creek Press, Point Reyes Station, California, USA. *Auk* 128: 184-187.

Oyler-McCance, S. J., C. A. Stricker, J. St. John, C. E. Braun, G. T. Wann, M. S. O'Donnell, and C. L. Aldridge. 2011. Effects of climate change on nutrition and genetics of White-tailed Ptarmigan. *Studies in Avian Biology* 39: 283-294

Wann, G. T., C. L. Aldridge, and C. E. Braun, 2011. Long-term trends in survival and population growth of White-tailed Ptarmigan in Colorado. Joint

Meeting of AFO, COS, and WOS, Kearney, Nebraska. Abstract: 85-86.

2012

Braun, C. E. 2012. Review: Sandercock, B. K., K. Martin, and G. Segelbacher, Editors. 2012. Ecology, conservation, and management of grouse. Studies in Avian Biology Number 39. Wilson Journal of Ornithology 124: 196-197.

Wann, G. T., C. L. Aldridge, and C. E. Braun. National Park Research Proceedings

Oyler-McCance, S. J., J. A. Fike, C. L. Aldridge, G. Wann, and C. E. Braun. 2012. Investigating temporal and spatial patterns of genetic diversity in White-tailed Ptarmigan in and around Rocky Mountain National Park. National Park Research Proceedings

Schroeder, M. A. and C. E. Braun. 2012. Declines in distribution and abundance of prairie-chickens; lessons applicable to sage-grouse. Annual Conference of The Wildlife Society 19: Abstract.

Wann, G. T., C. L. Aldridge, N. T. Hobbs, and C. E. Braun. 2012. Combining multiple sources of data to analyze population demographics of the alpine-endemic White-tailed Ptarmigan. Annual Conference of The Wildlife Society 19: Abstract.

Braun, C. E. and T. V. Dailey, Editors. 2012. Quail VII: Proceedings of the Seventh National Quail Symposium. The University of Tennessee, National Bobwhite Conservation Initiative, Knoxville. 386 pp.

2013

Braun, C. E. and R. E. Tomlinson. 2013. Henry Milton Reeves. In Memory. The Wildlife Society Professional 7 (4): 70. Longer Version On-line @ TWS Member Link and In Memory Page.

Houston, C. S. and C. E. Braun. 2013. In Memoriam: Henry Milton Reeves, 1927-2012. Auk 130: 813.

2014

Braun, C. E., W. P. Taylor, and S. E. Ebbert. 2014. Changes in Evermann's Rock Ptarmigan density on an eastern portion of Attu Island, Alaska, 2003-2009. Northwestern Naturalist 95:28-34.

Total = 320 as of 27 March 2014

**Braun, C. E., S. J. Oyler-McCance, J. A. Nehring, M. L. Commons, J. R. Young,
and K. M. Potter. 2014. The historical distribution of Gunnison Sage-Grouse
in Colorado. Wilson Journal of Ornithology 126: In Press.**