

Colorado Scrapie Sources

[New England Shepherd](#), Volume 11, 1966, United States: A. A. Lund Associates

“A single case of scrapie turned up in Colorado in January, according to the latest USDA report” [page 3 and 4] Reference to: Summary of Scrapie Outbreaks in the U.S. since September 1, 1964. ARS Animal Health Division Mimeo, February 24, 1966.

Proceedings, ... [Annual Meeting of the United States Live Stock Sanitary Association](#)

By [United States Livestock Sanitary Association. Meeting](#) · 1967 page 481 of this book has information

“An outbreak was disclosed in Colorado for the first time by a veterinary practitioner in Kiowa County. The source is believed to be a Stanton County, Kansas flock.”

[Chronic Wasting Disease \(CWD\) - America's Answer to Mad Cow Disease](#) October 17, 2017
Animal Development, Chris Gill

“Both Wyoming and Colorado have historically reported scrapie in sheep. Colorado reported scrapie in 1966 and Wyoming twice (1959 and earlier)”... [Fort Collins] Surplus does were released back into the wild after fawning in the facility ...

[Animal Morbidity Report](#). (1965, 1966, 1967). United States: Veterinary Services, Animal & Plant Health Inspection Service, U.S. Department of Agriculture.

“... Through August 31, 1966, 160 scrapie-infected sheep flocks have been reported in this country in 119 counties in the following 28 states: ... Colorado (1) ... Wyoming (2)” [page 15]
The report for February, 1966, shows a case of scrapie reported in Colorado with a footnote saying this was from January. No other cases were reported in Colorado through 1967.

Hourrigan, J.L. “Scrapie in the United States and the Scrapie Eradication Program. [Report of Scrapie Seminar Held in Washington D.C.](#) January 27-30, 1964. USDA Agricultural Research Service

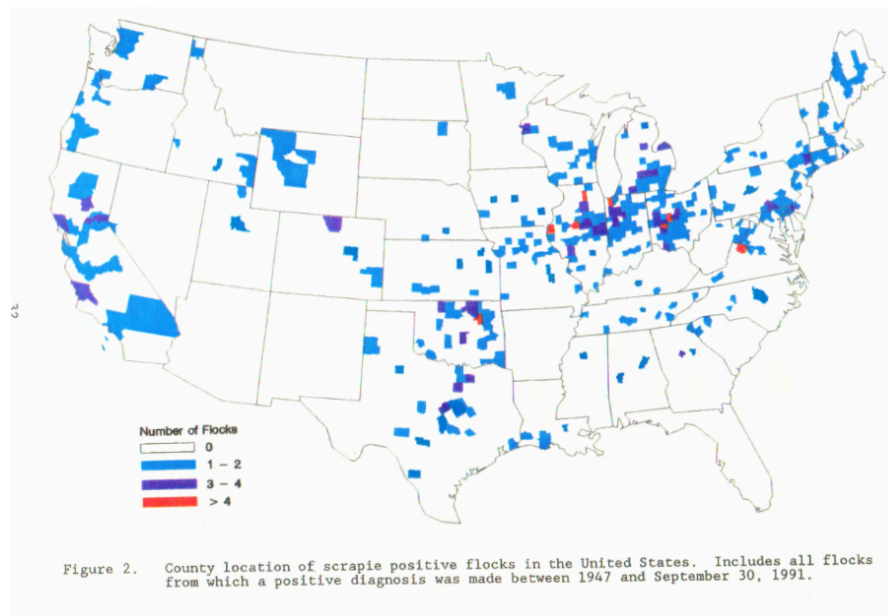
Map shows no scrapie in Colorado or eastern Wyoming area as of 1964. Figure 1 on page 333



Figure 1.

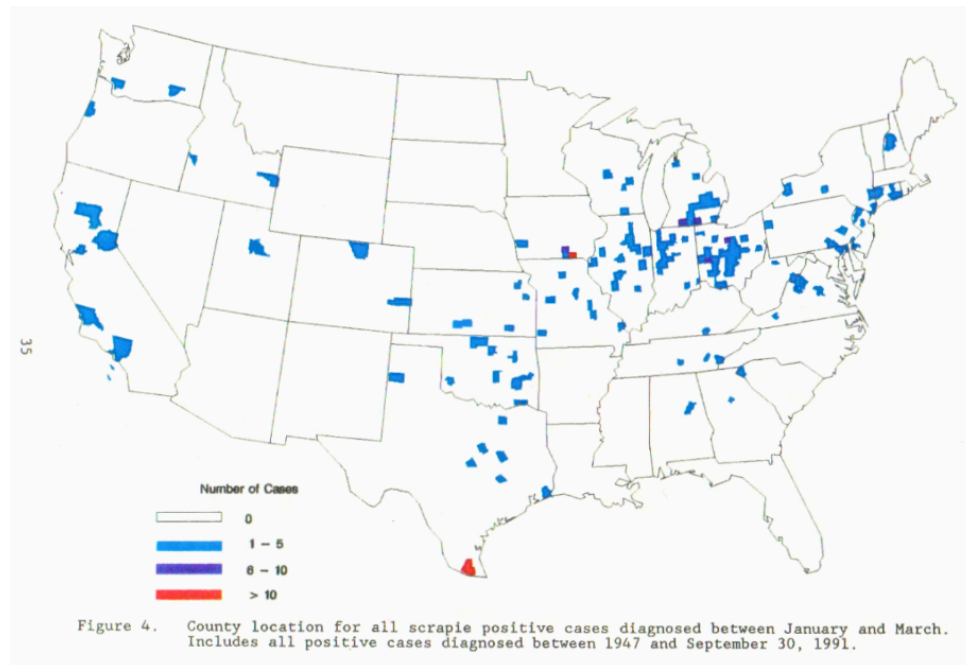
The following maps are from: Nora E. Wineland, [Epidemiology of reported scrapie in the United States: 1947-1991](#). Master's Thesis, Clinical Sciences Department. Colorado State University Fort Collins, Colorado. Spring 1993.

The first map shows county locations of scrapie by county from 1947 to 1991. In Colorado, the most northern county is Larimer where Fort Collins is located. It shows the most infected flocks



The map below shows infections discovered between January and March. The first flock in Colorado was discovered in January, 1966. Two counties fit that group. The northern most

county, Larimer, and Kiowa county in the southeast. Since Larimer has the most overall cases as illustrated in the previous map, it is likely the first county observed.



Fort Collins was working on Scrapie; they made an educational film in 1957.

[Proceedings of the 1956 Regional Meetings on Foreign Animal Diseases](#)

Phoenix, Ariz., Mar. 15-17 p. 134

provides a list of educational films about scrapie, including "Fort Collins - Agricultural Extension Service, Colorado A. & M. College

[National Association of State Departments of Agriculture. Annual Convention](#) 1959. Proceedings ... Annual Convention. page 14

"[Resolution No. XVI - Scrapie Disease Quarantine & Research](#) - Much work and follow-up has resulted. Mr. Paul Swisher of Colorado is Chairman of a special scrapie study committee. The have held field hearings ... " Colorado's Commissioner of Agriculture

Testing for scrapie at Fort Collins, 970 area code includes Fort Collins

[The Sheep Book: A Handbook for the Modern Shepherd](#) - Page 9

Ronald B. Parker · 2001 Swallow Press/Ohio University Press

"test is called a PCR test and is done at Colorado State University " provides phone number with 970 area code which is for Fort Collins

Sheep were kept at Fort Collins where they were doing medical experimentation

Possible Origins of Chronic Wasting Disease . By Gary Gerhardt, Staff Writer, Rocky Mountain News, Colorado USA November 5, 2001.

Fort Collins, Colorado – A state Division of Wildlife biologist believes a nutritional study he conducted with deer, sheep and goats in the late 1960s might have been the genesis of chronic wasting disease. Gene Schoonveld suspects some of the sheep in his study had scrapie, a relative of chronic wasting disease. Some of the deer might have become infected with scrapie, which then mutated into CWD and spread to other deer.

Williams ES, Young S (1980) [Chronic wasting disease of captive mule deer: a spongiform encephalopathy](#). J Wildl Dis 16:89–98 [Both authors worked at Fort Collins]

... The wildlife facilities in which the disease has been observed subserve experimental nutritional, metabolic and disease studies of deer and other non- domesticated ruminants. The majority (approximately 90%) of mule deer were hand raised from infancy after they received colostrum and were separated from does at 1-5 days of age. Most were born to does trapped in the wild during pregnancy, brought to the facility, and released after parturition. The remainder were either born to resident does bred in captivity or orphan fawns captured in the wild... From time to time a few young adult deer trapped in the wild have been added to the permanent captive populations... Within the facilities, deer have had irregular and discontinuous contact with other wild ruminants and domestic cattle, goats and sheep...

Anja Höing, Arieahn Matamonasa Bennett [Humans and Animals: Intersecting Lives and Worlds](#). (2019). Netherlands: Brill.

CWD first arose in captive mule deer housed with Scrapie-infected sheep in the late 1960's in Colorado research facilities, though it was not initially identified as a TSE until 1978.

From page 69:

while husbandry practices that contribute to the spread of disease extend the consequences of hfh beyond the boundaries of the fence. Chronic Wasting Disease (CWD) is a prion disease of cervids believed to be caused by a transmissible spongiform encephalopathy (TSE) not unlike Bovine Spongiform Encephalopathy, (BSE).⁵¹ CWD first arose in captive mule deer housed with Scrapie-infected sheep in the late 1960's in Colorado research facilities, though it was not initially identified as a TSE until 1978.⁵² CWD has since spread from where it was first diagnosed in 1981 among free-ranging deer and elk in a contiguous area in north-eastern Colorado and south-eastern Wyoming (where the disease is now endemic) to over 20 states and several countries (See Fig. 2).⁵³ Current research to determine if CWD arose spontaneously (as Creutzfeldt-Jakob Disease, 'CJD' in humans has) or was derived somehow from Scrapie has not yielded any direct evidence.⁵⁴ There is speculation that deer may have come in contact with Scrapie prions from shared pastures in the Rocky Mountain range in Colorado where sheep had been intensively grazed since the 1900's.⁵⁵

[Neurodegenerative Diseases: Pathology, Mechanisms, and Potential Therapeutic Targets.](#)

(2017). Germany: Springer International Publishing.

quently undertaken to prove that BSE was transmissible [29].

Epidemiological studies suggest that BSE arose from dietary exposure that occurred around 1982, had an incubation period of 3–8 years, and was most likely from scrapie-infected sheep [29]. The sudden rise of BSE in the UK during the 1980s and 1990s was almost certainly a result of intra-species re-cycling due to the practice of feeding cattle meat and bone meal derived from slaughtered cattle. The introduction of a meat and bone meal ban in 1988 dramatically reduced the infection rate. At its peak, the highest number of BSE-infected cattle was detected in 1992 at 36682 (reviewed [30]), with two cases (one atypical) reported in the United Kingdom in 2015 [31]. Ingestion of BSE-contaminated beef products caused the zoonosis vCJD described above.

Scrapie Was Uncommon

[Epidemiological Analysis of Reported Scrapie in Sheep in the United States:](#) 1,117 Cases (1947 to 1992) Wineland, N.E., Detwiler, L.A., and Salman, M.D. JAVMA. Vol 212. No. 5, March 1, 1998

From 1965 to 1992 there were only 19 positive sheep in 16 flocks throughout the Mountain West, including Idaho, Montana, Nevada, Arizona, Nevada, New Mexico, Wyoming, Colorado, and New Mexico

[The rationale for ridding U.S. of scrapie](#) April 15, 2002 American Veterinary Medical Foundation (AVMF)

... Scrapie is uncommon in the United States. The disease has been diagnosed in only about 1,600 sheep and goats since it was first found here in 1947.

[Cousin to mad-cow disease hits deer, elk](#) March 16, 1998 High Country News

... "That's how scrapie got spread around," says Pringle, who operates the Mad Cow Disease home page for the Sperlman Foundation. "They brought in (infected) Suffolk sheep from England (in the 1940s)...."

[Scrapie: An overview of the disease and the National Scrapie Eradication Program](#) Prepared by the Scrapie Management Team. USDA, APHIS, Veterinary Services. September, 2012

... Classical scrapie was not always present in the United States. The disease was first observed in a sheep flock in Michigan in 1947. It is believed that the flock became infected through the import of British origin sheep via Canada.... The first case of scrapie in a goat in the United States was reported in 1969, in a goat that had transferred from its herd of origin in Missouri to the scrapie experimental station in Mission, Texas. Although the goat was diagnosed with scrapie in Mission, epidemiological analysis suggested that the animal became infected around the time of its birth in its herd of origin...