



*Western Center for Integrated
Resource Management*

**Colorado
State
University**

A Bibliography of Literature on
Wolf Impacts
in Support of
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BIBLIOGRAPHY

1. *94-CV-286*, in *Patrick Fisher*. 2000, UNITED STATES COURT OF APPEALS TENTH CIRCUIT. p. Wyoming Farm Bureau, et al. vs Department of Interior, et al.

Court case that was filed with the US court of appeals regarding the Farm Bureaus vs. the Department of Interior from 2000. There was talk of a wolf reintroduction and the Farm Bureaus' contention was that re-introducing wolves as endangered did not coincide with the tenets of the Endangered Species Act. Essentially, the Farm Bureaus' were trying to protect the livestock, livestock ranchers and the public at large. This information is mentioned on page 2 of *Wolves at Your Door*.

2. *CV 08-56-M-DWM - Final decision*. 2008, IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA MISSOULA DIVISION. p. Defenders of Wildlife, et al. vs. USFWS, et al.

Final decision by the Montana courts in the case of Defenders of Wildlife vs US Fish and Wildlife Service. The Montana Judge ruled in favor of the Plaintiff which in turn renewed protection for the gray wolves in the Northern Rockies. The USFWS later rescinded their decision to delist gray wolves in the Northern Rockies. This information is mentioned on page 3 of *Wolves at Your Door*.

3. *CV 08-56-M-DWM - Injunction*. 2008, IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MONTANA MISSOULA DIVISION. p. Defenders of Wildlife, et al. vs. USFWS, et al.

Injunction describing the case of Defenders of Wildlife vs US Fish and Wildlife Service. This injunction eventually lead to the final decision listed above.

4. Bridget M. Vonholdt, D.R.S., Douglas W Smith, Dent A Earl, John P Pollinger, Robert K Wayne, *Blackwell Publishing Ltd The genealogy and genetic viability of reintroduced Yellowstone grey wolves*. *Molecular Ecology*, 2008. **17**: p. 252-274.

Journal article discussing the genetic variability of gray wolves in the Northern Rockies. The determination was that the genetic variability is currently very high but simulations show degradation over time. They determined that the only way for the wolf packs in the Northern Rockies to retain a high enough genetic variability over time, they would have to intermingle with larger populations that reside in Canada. It did not however give any inclinations to the magic number of wolves that need to be present in order to begin combining with Canadian packs. This information is listed on page 6 of *Wolves at Your Door*.

5. Commission, W.G.a.F., *Final Wyoming Gray Wolf Management Plan*, W.G.a. Fish, Editor. 2007.

Approved management plan submitted by the Wyoming Game and Fish department. This plan was full of useful information such as, wolf population numbers, depredation numbers, potential hunting regulations, policies regarding defense of livestock, etc. Information from this management plan was used on page 4, 9 and 10 of *Wolves at Your Door*.

6. Commission, W.G.a.F., *2008 Draft Revision Wyoming Gray Wolf Management Plan*, W.G.a. Fish, Editor. 2008.

This is the most recent draft submitted by Wyoming Game and Fish to the USFWS. There were many changes in language, especially regarding the goals of the WGaF to sustain wolf population numbers. It is interesting to this issue in that, government agencies are still creating and revising management plans in an effort to be prepared for the eventual delisting of wolves.

7. Douglas W. Smith, P.J.W., Carol Jaworowski, *Greater Yellowstone Ecosystem*, in *Yellowstone Resources and Issues 2008*, C. Duckworth, Editor. 2008, Division of Interpretation, Yellowstone National Park. p. 47-52.

Journal article produced by Yellowstone National Park. It gives a general overview of the ecology in the park itself. It also gives some general descriptions of trophic cascades, how wolves can cause such a thing, and what happens to the land when the Elk are pressured by a predator such as the wolf.

8. Eastern Shoshone tribe, N.A.t., Shoshone and Arapaho Tribal Fish and Game Department, *Wolf Management Plan for the Wind River Reservation*. 2007.

Approved management plan submitted by the Wind River Reservation. This plan was full of useful information such as, wolf population numbers, depredation numbers, potential hunting regulations, policies regarding defense of livestock, etc. Information from this document was used on page 4 of *Wolves at Your Door*.

9. Fischer, H., *Wolf Wars*. 1995: Falcon Press Publishing Co., Inc. 183.

This was an older book that was helpful in understanding some of the Naturalist community's point of view on the wolves in the Northern Rockies. It was a source for general information on the feelings surrounding the wolf reintroduction and some of the controversy surrounding the initial reintroduction.

10. Group, C.W.M.W., *Findings and Recommendations for Managing Wolves that Migrate to Colorado*. 2004, Colorado Wildlife Commission.

The Colorado Wildlife Commission's findings and suggestions on what to do if and when wolves migrate to Colorado. At this point, there have been wolves found in Colorado. Albeit not many, but Colorado has been preparing for wolves for the past few years. These findings present different management options that are possible and the potential outcomes of each. It was created by a committee of people that represent agriculture, wildlife advocates, sportsmen and government officials.

- Hamlin, K.L., *Monitoring and Assessment of Wolf-Ungulate Interactions and Population Trends within the Greater Yellowstone Area, Southwestern Montana, and Montana Statewide*, W.a.P. Montana Fish, Editor. 2006. p. 1-38.

Study documenting how wolves and elk interact in Yellowstone National Park. This research documented wolf kills on elk, wolf effects on elk migration and movement, effects on elk behavior, etc. In their study areas, they found that some elk populations were more affected by wolves than others.

- Hawthorne L. Beyer, E.H.M., Nathan Varley, Mark S. Boyce, *Willow on Yellowstone's Northern Range: Evidence for a trophic cascade?* Ecological Applications, 2007. **17**(6): p. 1560 - 1571.

Study done on the willows in Yellowstone National Park. This research tries to find evidence for a trophic cascade caused by wolves. Evidence of increased growth in willows has been observed and it is believed to have been caused by changes in elk behavior due to the presence of wolves. Their research shows that there is a trophic cascade occurring and that growth of willows has to be attributed to more than just climactic changes. Information from this article is used in Wolves at Your Door on page 7.

- J.D.C Linnell, R.A., Z. Anderson, L. Balciuskas, J.C. Blanco, L. Boitani, S. Brainerd, U. Beitenmoser, I. Kojola, O. Lidberg, J. Loe, H. Okarma, H.C. Pedersen, C. Promberger, H. Sand, E.J. Solberg, H.Valdmann, P. Wabekken, *Fear of Wolves: A review of wolf attacks on humans*. 2002, Norwegian Institute for Nature Research. p. 1-65.

This research was used to describe wolf attacks on humans in comparison to other native predators such as bears and cats. The report itself does not limit itself geographically and covers animal attacks, specifically wolves, from anywhere wolves are present. The table used in Wolves at Your Door on page 8 regarding bear and cat attacks on people was taken from this research paper.

Area	Period	People killed	Attacks per annum	Reference
Brown / Grizzly bear				
Europe	20 th century	36 (12)	0.12 (0.02)	Swenson et al. 1996
Asia	20 th century	206	2.0	Swenson et al. 1996
North America	20 th century	71	0.71	Swenson et al. 1996
Puma				
North America	1890-2001	17	0.15	Beier 1991; Fitzhugh unpublished
North America	1890-2001	72 (injured)	(0.65)	Beier 1991; Fitzhugh unpublished

- Kelly, C.D. *Babbitt Wouldn't Listen*. The Voice of Agriculture 1997 [cited; Available from: <http://www.fb.org/index.php?fuseaction=newsroom.focusfocus&year=1997&file=fo1222.html>].

This is an opinion piece published by the American Farm Bureau. It discusses the reasons for the lawsuit against the Department of Interior, including the argument of the misuse of the Endangered Species Act and the importance of protecting livestock producers in the Northern

Rockies. This information was used to help shape the view of the agricultural community.

15. Kim Murray Berger, E.M.G., *Does interference competition with wolves limit the distribution and abundance of coyotes?* Journal of Animal Ecology, 2007. **76**: p. 1075-1085.

This research looks at the interaction of wolves and coyotes around Yellowstone. This paper talks about direct and indirect competition between wolves and coyotes and also discusses the effect wolf packs have had on coyote populations. What they found is that on local levels wolves do have an effect on coyote populations and can reduce numbers of coyotes due to competition for resources. It did not find that wolves have had a “global” impact on total coyote population levels. This information was used on page 6 of Wolves at Your Door.

16. L. L. Eberhardt, P.J.W., R. A. Garrott, D. B. Houston, *A Seventy-Year History of Trends in Yellowstone’s Northern Elk Herd.* Journal of Wildlife Management, 2007. **71**(2): p. 594-602.

Study done on the history of elk populations in Yellowstone. This study looks at how elk populations have been affected by the introduction of wolves. It also compares how wolves affect the elk as compared to regulate hunters. They concluded that hunters have had more impact on elk populations than wolves have. Information from this study was used on page 6 of Wolves at Your Door.

17. Mark Hebblewhite, E.H.M., *Multiscale wolf predation risk for elk: does migration reduce risk?* Oecologia, 2007. **152**: p. 377-387.

Study done on elk migration and the reduction of risk to wolf predation. This study looks at how elk react to the presence of wolves and if their migratory patterns change to deal with this risk. They conclude that large scale migration does reduce risk of predation. It also states that non migratory elk may be able to reduce their risk as well in certain instances. Information from this study is used on page 6 of Wolves at Your Door.

18. McIntyre, R., *War Against the Wolf.* 1995: Voyager Press, Inc. 495.

A book containing general information regarding the history of wolf policy in America. This aided in the creation of the wolf history timeline on page 1 of Wolves at Your Door and gave some insights into the historical policy created against the wolves.

19. McNay, M.E., *A Case History of Wolf-Human Encounters in Alaska and Canada.* 2002, Alaska Department of Fish and Game.

Research covering the history of wolf/human encounters for the past 100 years. Mark McNay found that there have been no recorded wolf attacks that lead to a person’s death in that 100 year time frame. There have been numerous records of wolf encounters, even some wolf attacks, but nothing that was fatal. Mark organized the paper into two major sections, aggressive

wolves and non aggressive wolves. From there he broke those two categories down even further to describe different aggressive and non aggressive behavior. The outline on page 8 of Wolves at Your Door uses numbers created in this research paper.

20. Montana Fish, W.a.P., *Final Environmental Impact Statement*. 2003, Montana Fish, Wildlife and Parks.

Approved management plan submitted by the Montana Fish, Wildlife and Parks department to the USFWS. This plan has information such as, wolf population numbers, depredation numbers, potential hunting regulations, policies regarding defense of livestock, etc. Information from this plan was used on page 9 of Wolves at Your Door.

21. Montana Fish, W.a.P., *Table 2. Summary of how each alternative addresses the issues identified by the Montana Wolf Management Advisory Council and by the general public in spring, 2002*. 2003, Montana Fish, Wildlife and Parks.

Table of alternative management plans outlined by Montana Fish, Wildlife and Parks, in their management plan/environmental impact statement. This table shows wolf issues that need to be addressed, such as defense of livestock, wolf population numbers etc. It then shows the alternative solutions in relation to the issues.

22. Scott Creel, D.C., Stewart Liley, John A. Winnie Jr., *Predation Risk Affects Reproductive Physiology and Demography of Elk*. *Science*, 2007. **315**: p. 960.

Study that looks at the affect of anti predator behavior in elk and how it changes reproductive behavior. Their findings show that anti predator behavior can have a great affect on reproduction in elk, which in turn can have a great affect on prey dynamics.

23. Scott Creel, J.W.J., Bruce Maxwell, Ken Hamlin, Michael Creel, *Elk Alter Habitat Selection As An Antipredator Response To Wolves*. *Ecology*, 2005. **86**(12): p. 3387-3397.

Study on the effect wolves have on elk habitat selection. In this study, it is found that wolves do effect elk habitat selection and this may be driving a trophic cascade. It is also determined that the reduction in elk numbers due to wolves has also had an effect on plant growth. Information from this study was used on page 6 of Wolves at Your Door.

24. Scott M Brainerd, e.a., *The Effects of Breeder Loss on Wolves*. *Journal of Wildlife Management*, 2008. **72**(1): p. 89-98.

Journal article that discusses the effects of a loss of breeding wolves and the importance of potential impacts caused by human interaction and management. It advises on how to treat removal of wolves where necessary while reducing the impact to the breeding population. It also advises on how to manage reproductive packs with regard to potential removal of pack members.

25. Service, U.F.a.W. *U.S. Fish And Wildlife Service Reopens Public Comment Period On 2007 Proposal To Delist Northern Rocky Mountain Population Of Gray Wolves Under The Endangered Species Act*. 2008 [cited; Available from: <http://www.fws.gov/mountain-prairie/pressrel/08-65.htm>].

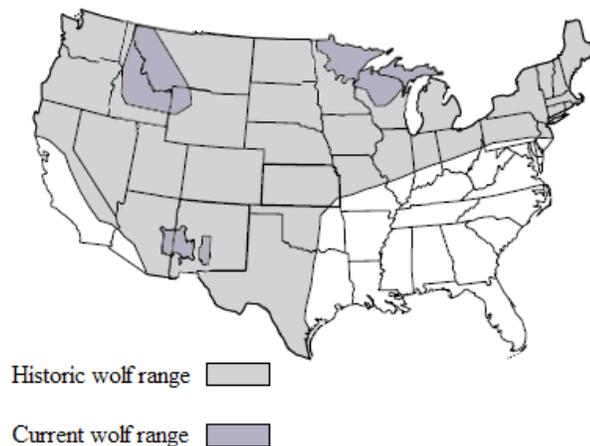
Information regarding the open period of public comment for the proposal to delist the gray wolf. The USFWS is working toward this end and wants the public's opinion of the matter.

26. Service, U.S.F.a.W., *Final Environmental Impact Statement -The Reintroduction of Gray Wolves to Yellowstone National Park and Central Idaho*. 1994, U.S. Fish and Wildlife Service.

Environmental impact statement that was created to describe the impact introducing wolves into the Northern Rockies would have. It is a document that gives multiple options for ways to address issues and potential conflicts. This document was the beginning of the research for Wolves at Your Door.

27. Service, U.S.F.a.W., *Gray Wolf Range in the Contiguous United States*. 2006, U.S. Fish and Wildlife.

This was a set of range maps showing historical vs. current wolf range in the US. A combination of two maps was created and displayed in Wolves at Your Door on page 1 and it is shown below.



28. Service, U.S.F.a.W., *Endangered and Threatened Wildlife and Plants; Final Rule Designating the Northern Rocky Mountain Population of Gray Wolf as a Distinct Population Segment and Removing This Distinct Population Segment From the Federal List of Endangered and Threatened Wildlife*, U.S.F.a.W. Service, Editor. 2008, U.S. Department of Interior.

This is the final ruling from the USFWS regarding the delisting of gray wolves in the Northern Rockies. This final rule was rescinded after the courts favored against the decision. The final

ruling document contained a great deal of information on the history of the wolf reintroduction, population goals, current population numbers, depredation, etc. There was also a segment for public comments and questions with subsequent responses from the USFWS.

29. Steve Nadeau, R.B., Toby Boudreau, Jay Crenshaw, Lauri Hanauska-Brown, Jim Hayden, Jason, T.K. Husseman, Michael Lucid, Daryl Meints, Jon Rachael, Jeff Rohlman, Dave Spicer, and a.C.W. Martha Wackenhut, *Idaho Wolf Population Management Plan 2008-2012*, I.F.a. Game, Editor. 2008, Idaho Fish and Game.

This is the approved management plan submitted by the Idaho Fish and Game department. This plan was full of useful information such as, wolf population numbers, depredation numbers, potential hunting regulations, policies regarding defense of livestock, etc. It also contained a section with results from a public questionnaire. Idaho sent requests for opinions from the agricultural community, public at large (non hunters) and the public at large (hunters). The results themselves were not used in *Wolves at Your Door*, but they helped to understand where people's stand on the issue.

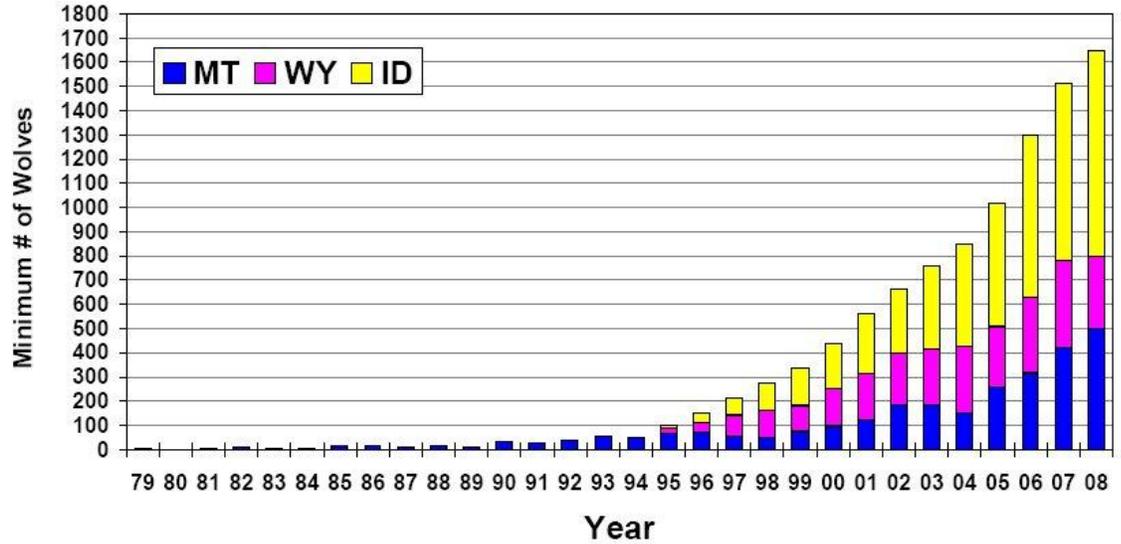
30. U.S. Fish and Wildlife Service, N.P.T., National Park Service, Montana Fish, Wildlife & Parks, Blackfeet Nation, Confederated Salish and Kootenai Tribes, Idaho Fish and Game, and USDA Wildlife Services. C.A. Sime and E. E. Bangs, eds, *Rocky Mountain Wolf Recovery 2007 Interagency Annual Report*, E.S. USFWS, Editor. 2008.

The groups listed above have put out this annual report since 1999. Only 2007 is listed since it is the most current and has the most historical data to go off of. This annual report has sections for each state and for the USFWS northern Rockies program. The information in the report is in regards to population numbers, overview of programs, etc.

31. U.S. Fish and Wildlife Service, N.P.T., National Park Service, Montana Fish, Wildlife & Parks, Blackfeet Nation, Confederated Salish and Kootenai Tribes, Idaho Fish and Game, and USDA Wildlife Services. C.A. Sime and E. E. Bangs, eds, *Figure 6. Northern Rocky Mountain Wolf Population Trends by State 1979-2007*. 2008.

Graph regarding wolf population trends over time taken from the 2007 annual report listed above. It is used on page 2 of *Wolves at Your Door*.

Figure 6. Northern Rocky Mountain Wolf Population Trends by State, 1979-2008



32. U.S. Fish and Wildlife Service, N.P.T., National Park Service, Montana Fish, Wildlife & Parks, Blackfoot Nation, Confederated Salish and Kootenai Tribes, Idaho Fish and Game, and USDA Wildlife Services. C.A. Sime and E. E. Bangs, eds, *Table 5b: Northern Rocky Mountain confirmed wolf depredation1, 1987-2007, by state.* 2008.

Chart providing information about wolf depredation numbers over time taken from 2007 annual

report. The chart is displayed on page 5 of Wolves at Your Door.

Table 5b: Northern Rocky Mountain Confirmed Wolf Depredation¹, 1987-2008, by State.

YEAR	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	TOTAL	
Montana																								
cattle	6	0	3	5	2	1	0	6	3	10	19	10	20	14	12	20	24	36	23	32	75	77	398	
sheep	10	0	0	0	2	0	0	0	0	13	41	0	25	7	50	84	86	91	33	4	27	111	584	
other 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	5	0	3	2	2	14	17	47	
dogs	0	0	0	1	0	0	0	0	4	1	0	1	2	5	2	5	1	4	1	4	3	2	36	
wolves moved	0	0	4	0	3	0	0	2	8	22	20	0	14	6	17	0	0	0	0	0	0	0	96	
wolves killed	4	0	1	1	0	0	0	0	0	5	18	4	19	7	8	26	34	40	35	53	73	110	438	
Wyoming																								
cattle										0	0	2	2	2	3	18	23	34	75	54	123	55	41	432
sheep										0	0	56	7	0	25	34	0	7	18	27	38	16	26	254
other 3										0	0	0	0	1	0	0	0	10	2	0	1	0	0	14
dogs										0	0	0	3	6	6	2	0	0	2	1	0	2	0	22
wolves moved										0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
wolves killed										0	0	2	3	1	2	4	6	18	29	41	44	63	46	259
Idaho																								
cattle										0	1	1	9	11	15	10	9	6	19	20	29	53	96	279
sheep										0	24	29	5	64	48	54	15	118	161	184	205	170	218	1295
other 3										0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
dogs										0	1	4	1	7	0	2	4	5	3	9	4	8	12	60
wolves moved										0	1	0	3	5	10	1	0	0	0	0	0	0	0	20
wolves killed										0	1	1	0	3	11	7	14	7	17	27	45	50	108	291
Total, 3 States																								
cattle	6	0	3	5	2	1	0	6	3	11	22	21	33	32	40	52	64	130	97	184	183	214	1109	
sheep	10	0	0	0	2	0	0	0	0	37	126	12	89	80	138	99	211	270	244	247	213	355	2133	
other 3	0	0	0	0	0	0	0	0	0	0	0	0	1	0	4	5	10	5	2	3	14	18	62	
dogs	0	0	0	1	0	0	0	0	4	2	4	5	15	11	6	9	6	9	11	8	10	14	115	
wolves moved	0	0	4	0	3	0	0	2	8	23	21	3	19	16	18	0	0	0	0	0	0	0	117	
wolves killed ²	4	0	1	1	0	0	0	0	0	6	21	7	23	20	19	46	59	86	103	142	186	264	988	

1 Numbers of animals confirmed killed by wolves in calendar year.

2 Includes wolves legally shot by livestock owners. Others killed in government control efforts.

3 Total livestock other than cattle and sheep confirmed killed by wolves between 1987 and 2008 are 21 llamas, 28 goats and 10 horses.

33. University, W.K. *A Timeline of Eradication and Reintroduction*. [cited; Available from:

http://bioweb.wku.edu/ADP/index_files/Page539.htm

Timeline of wolf history. Information from this was used on page 1 of Wolves at Your Door

34. USDA NASS, W.F.O., *Wyoming Agricultural Statistics 2008*. 2008, USDA NASS. p. 39-58.

NASS data was used for a comparison of wolf depredation numbers to total cattle and sheep populations, and to depredation numbers of other predators. This information can be found on page 6 of Wolves at Your Door.

35. Wildlife, D.o. *District Judge reverses gray wolf delisting throughout Northern Rockies*. 2008 July 18, 2008 [cited; Available from:

http://www.defenders.org/newsroom/press_releases_folder/2008/07_18_2008_district_judge_reverses_gray_wolf_delisting_throughout_northern_rockies.php.

A press release from Defenders of Wildlife expressing their collective feelings due to their win in court. This is their official statement regarding the re-listing of wolves in the Northern Rockies in 2008. A quote from Susana Asha Stone of Defender of wildlife was used on page 4 of Wolves at Your Door.

36. Wildlife, D.o. *A Chronology of Wolf Recovery in the Northern Rockies*. 2008 [cited; Available from: http://www.defenders.org/programs_and_policy/wildlife_conservation/imperiled_species/wolves/wolf_recovery_efforts/northern_rockies_wolves/background_and_recovery/chronology_of_wolf_recovery.php?ht=wolf%20depredation%20wolf%20depredation].

Defenders of Wildlife presented this timeline of wolf recovery on their website. It details policies, court battles, and other historical moments in wolf recovery efforts. Some items were used in a wolf history table on page 1 of *Wolves at Your Door*.

37. William J. Ripple, R.L.B., *Wolves and the Ecology of Fear: Can Predation Risk Structure Ecosystems?* *BioScience*, 2004. **54**(8): p. 755-766.

Study showing wolves being the cause for a trophic cascade. They contend that wolves and their predation on species such as elk is an important for biodiversity. They conclude that more information is needed to understand the full effects of predators on the ecosystem.

38. William J. Ripple, R.L.B., *Restoring Yellowstone's Aspens with Wolves*. *Biological Conservation*, 2007. **138**: p. 514-519.

Study on the effect wolves have had indirectly on aspen tree growth. This is more evidence of a trophic cascade caused by wolves. This study found that aspens have increased their growth and elk have decreased their browsing on aspens. Information from this study was used on page 7 of *Wolves at Your Door*. Also, a series of graphs were used on page 7 as well. They are shown below.

