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AGRICULTURAL PRODUCT DISPARAGEMENT REGULATION IN THE STATES

A DISSERTATION

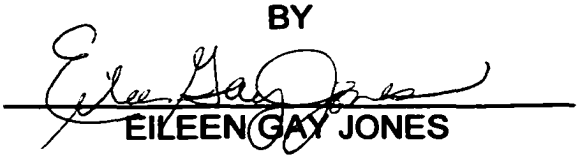
SUBMITTED ON THE FIFTEENTH DAY OF SEPTEMBER 2001

TO THE GRADUATE FACULTY OF TULANE UNIVERSITY

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

DOCTOR OF PHILOSOPHY

BY



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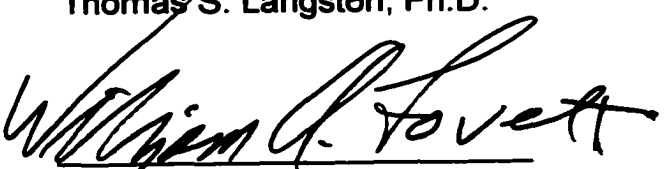

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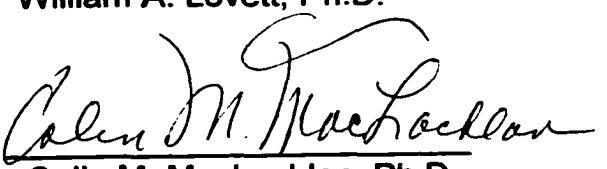

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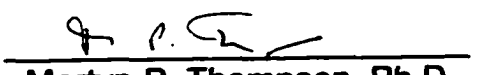

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ABSTRACT

This dissertation examines the efforts of states to enact agricultural product disparagement legislation. The laws provide a cause of action and damages for derogatory statements made about perishable farm produce. Prior to the enactment of these laws, state law did not provide a legal remedy for derogatory statements made about generic farm produce.

State legislatures began debating agricultural product disparagement legislation after the Alar incident of 1989. Louisiana was the first state to pass a bill into law in 1991. Subsequently, twelve other states followed suit. Qualitative research on this topic has been based on the premise that farmers and others involved in agricultural businesses, particularly pesticide manufacturers, influenced bill passage. This research builds on prior qualitative research, by modeling the influences on bill passage using a quantitative model.

Seven variables were used for the multivariate analysis: party control, ideology, state support for the environment, and interest group activity, including, environmentalists, farmers, pesticide manufacturers, and free-speech groups. States that have passed agricultural product disparagement legislation are predominantly in the Southern and Western parts of the country. The enacting states also tend to be politically conservative, and have a strong farming community.

ACKNOWLEDGMENTS

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In addition, I would like to thank the students who inspired me at both Tulane University College and Southern University Law Center, and my friends at Arch St. United Methodist Church, Philadelphia.

This dissertation is dedicated to my father, Joseph H. Jones, Jr.

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INTRODUCTION

The Importance of State Level Analysis for Environmental Policies

Agricultural product disparagement laws are a new form of policy being adopted at the state level. The most fundamental question for research on this topic is why a study of state policy is important or significant. According to two well-known scholars, state policy research is indeed valuable to academic research: "[T]he task for students of environmental policy and politics is to specify when, where, and under what conditions states are able to successfully implement environmental programs" (Davis and Lester 1989, 58). With this information, predictors about future policy directions can be made. As demonstrated in the Literature Review later in this chapter, state environmental policy studies were "latecomers" to the larger body of state policy research. Many questions in both state policy generally, and environmental state policy more specifically, remain open.

The purpose of this study is to meaningfully add to the existing literature. In addition to being of value to understanding state policy innovation generally, state studies can add to our understanding of interest group politics. As articulated by Sinclair (1983, 126): "[I]nterest group studies are badly in need of empirical

research and conceptual development." As discussed in more detail later in this chapter and in Chapter Three, one goal of this study is to add to the empirical research of interest group politics.

In addition to considering the value of this research, it is important to consider whether any other research has addressed the precise topic of agricultural product disparagement laws. To date, no dissertation has focused on comparing the state policy process that resulted in the passage of agricultural product disparagement regulation (based on a search through University Microfilms International (UMI)). The significance of the topic as a study in state policy change, however, should not be underestimated.

Agricultural product disparagement laws involve issues of public health, the environment, economics, and law. The laws purportedly are designed to ensure a varied and plentiful food supply, and benefit farming interests. Less directly, the laws benefit manufacturers and sellers of farm chemicals, often generically referred to as pesticides. However, agricultural product disparagement laws may also stifle public debate about the risks associated with pesticides. The laws may also have future implications for other debates about food safety, particularly genetically-modified foods, irradiated foods, and meat processing.[1]

The topic of agricultural product disparagement laws is also important since food safety issues are an emerging public issue (Maney and Plutzer 1996). When Americans have been questioned about pesticides and food safety, the results are

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[1]Geoffrey Cowley, "Cannibals to Cows: The Path of A Deadly Disease," *Newsweek*, 12 March 2001, 53-61.

telling: 71% of those polled were concerned about the issue (League of Conservative Voters 11/12/00). Similarly, when asked about the importance of the environment as a public issue, 77% of those polled said they cared a great deal or a fair amount (Gallup 03/05/01).

The research literature suggests a number of questions that remain open for further study: Whether or not policy innovation diffuses in regional patterns; the extent to which industrialization affects regulation and why; the relationship between income, ideology, partisanship, political culture and public opinion and their relative, if any, influence on state policy; who participates in policy formation and the effect of that participation, and; how legislatures make policy in the face of scientific uncertainty. Additional studies such as this dissertation will add to the body of literature which is attempting to provide richer answers to these questions.

Further understanding of interest group politics would certainly advance current research. The influence of interest groups has a rich history of analysis in theoretical literature. This is not surprising, given their presence in state capitals. According to Hedge (1998, 57), "more than 42,000 lobbyists plied their trade in the states' capitals in 1990, a number that represents a 20 percent increase in just four years." Hedge also reports that: "Groups and their lobbyists elsewhere often provide travel to friendly legislators, pick up the tabs for the members' and their staff's meals, and do favors for members and their constituents, all of this in addition to their often sizable contributions to political campaigns and leadership PACs" (64).

At the same time, there have been recent efforts to control the power or influence of interest groups by limiting campaign contributions, and requiring

disclosure of certain gifts to legislators and their staff members (Bullock 1994; Neal 1995, 1996). In addition, theoretical literature also tells us that strong governors or party leaders may be able to temper the influence of interest groups (Wiggins, Hamm, and Bell 1992). Still, these efforts are not consistent across the states, may not be enforced, and tend to exist in states in least need of reform (Morehouse 1981; Opheim 1991; Bullock 1994; Thomas and Hrebenar 1996).

Theoretical literature about interest groups largely depends on a central assumption: the primary focus of interest groups is on influencing public policy (Cigler and Loomis 1983). The purpose of interest groups is to shape legislation and influence government policies on issues of interest to their members (Vig and Kraft 1997). As Theodore Lowi explains, public officials act "as if it were supposed to be the practice of dealing only with organized claims in formulating policy, and of dealing exclusively through organized claims in implementing programs" (Lowi 1967, 18). Moreover, "the politics of getting problems to government," as identified by theorist Charles O. Jones (1984), frequently rests with interest groups.

There is a rich body of theoretical and qualitative research concerning the role of business in politics. Hedge (1998, 69) maintains that "interest groups, particularly business groups, play a major role in the politics of a majority of the American states, a role that is not likely to abate any time soon." Lindblom (1980, 73) explains that business holds a privileged position in American society. Since the American economy is heavily dependent on private business for growth and stability, government officials are inclined to listen to the concerns and demands of big business. Thus, government officials "give business needs precedence over

demands from citizens through electoral, party, and interest-group channels."

Chemical manufacturers which produce pesticides are thought to have a particularly close relationship with legislatures. This may be a reflection of the significance of chemical manufacturing to the U.S. economy. According to the Chemical Manufacturers Association, the chemical industry in United States is the largest in the world, producing over 400 billion dollars worth of product. In contrast, Canada produces about 21 billion dollars worth of chemicals, and Mexico about 15 billion. Pesticide manufacturing in the United States has a long history, 300 years, largely increasing after World War II (Reuben and Brustall 1973). According to the Environmental Protection Agency (EPA), about three quarters of the pesticides produced in the United States are used in agriculture. About 4,627 million pounds of pesticides are produced in the United States each year, costing farmers about 8.3 billion dollars annually. Thus, the significance of the pesticide industry to the U.S. economy raises questions about the influence that industry may wield over public policies.

Theoretical research has also addressed the role of party affiliation and loyalty in legislative voting behavior. In their seminal study, Froman and Ripley (1965, 52) conclude that the most important variable in legislative outcome is party organization. The underlying assumption of their theory is that legislative leaders have the ability to award and punish those who follow (or not) the party line. More recently, Cox and McCubbins (1993) added to the Froman and Ripley theory by noting that other factors may affect the ability or tendency of party members to vote in blocks: the majority party's control of the legislative agenda; leadership and

control of committees, and; control over staff appointments and other "perks." All of these may make a legislator more reluctant to buck his or her party's position on an issue, particularly the more significant the issue at hand is to party leadership.

However, more recently that assumption has been challenged. Now some scholars believe that a legislator's preference, irrespective of party affiliation or politics, is a stronger predictor of voting behavior (Krehbiel 1998). Krehbiel concludes: "the apparent explanatory power of the variable, party, may be attributed solely to it being a good measure of preferences" (238). This echoes Mayhew's controversial position that majority party strength could not be very useful in explaining voting behavior (Mayhew 1974, 27). Thus, one research question that is salient for today's work is whether or not party affiliation or personal preferences affect legislators' voting patterns. One purpose of this study is to add some insight into these divergent theoretical perspectives, i.e., do party or personal preferences matter.

The value of state level research can be summarized as enriching the literature on interest group politics and on the determinants of state innovations in policy. In this research, the specific innovation in policy is in the form of a law known as agricultural product disparagement legislation. These laws are part economic, part environmental, part legal, and certainly political. The historical background to the adoption of these laws is necessary to further understand the empirical research that follows.

The Rise of Agricultural Product Disparagement Regulation: Alar and its Aftermath

Agricultural product disparagement regulation is a phenomenon of the 1990s. In the early 1990s, states began passing bills designed to provide recovery of monetary damages to farmers who suffered economic loss after disparaging statements were made about agricultural produce. Louisiana was the first state to pass agricultural product disparagement legislation in 1991,[2] as depicted in Figure 1. As of 2001, thirteen states have enacted agricultural product disparagement laws.[3] In twenty other state legislatures, agricultural product disparagement bills have been debated, but without final passage or approval.[4] Thus, a majority of state legislatures have at least considered this type of legislation. A copy of a

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[2]Colorado was the first state to introduce a food disparagement bill. While the Colorado bill was vetoed by the governor, in 1994 the legislature amended the criminal code making false statements about produce a crime.

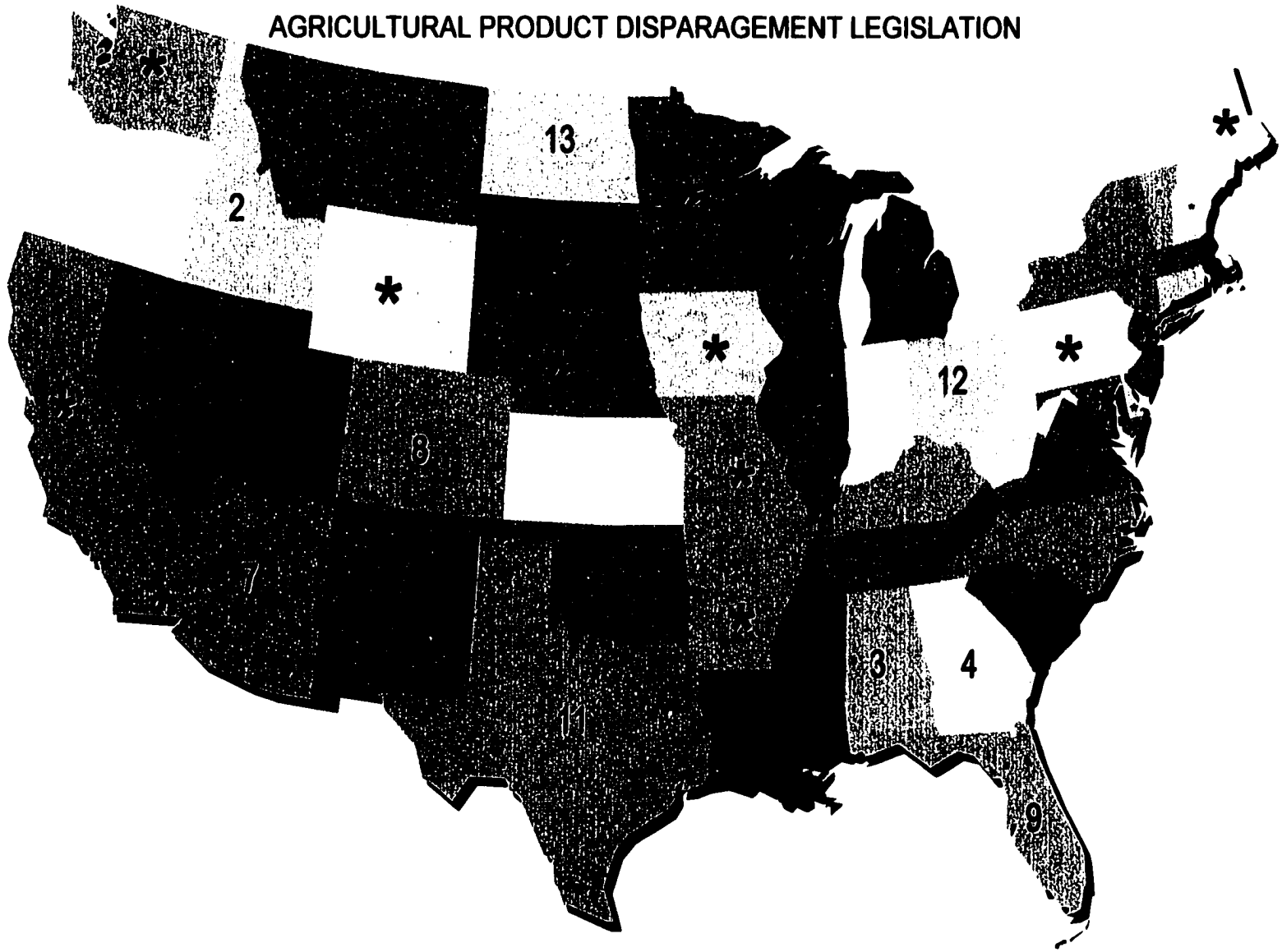
[3]Alabama, Al. Code § 6-5-620; Arizona, Ariz. Rev. Stat. Ann. § 3-113; Florida, Fla. Stat. Ann. § 865-065; Georgia, Ga. Code Ann. § 2-16-1 to 4; Idaho, Id. Code § 6-2001 to -2003; Louisiana, La. Rev. Stat. Ann. §§ 4501-4504; Mississippi, Miss. Code Ann. § 69-1-251 to -257; North Dakota, N.D. Cent. Code §§ 32-44-01-04; Ohio, Ohio Rev. Code Ann. § 2307.81; Oklahoma, Okla. Stat. Ann. Tit. 2, §§ 3010-3012; South Dakota, S.D. Codified laws § 20-10A -4; Texas, Tex. Civ. Prac. & Rem. Code Ann. §§ 96.001-96.004.

[4]Arkansas (1999 H.B. 1938, 82nd Reg. Sess.); California (S.B. 492, Reg. Sess., Cal. 1995; A.B. 558, Reg. Sess, 1995); Colorado (1991 H.B. 1176, 1st Reg. Sess.); Delaware (S. 311 Leg. Sess.); Illinois (S. 234, 89th Gen. Assem., Reg. Sess., 1995); Iowa (H.R. 106, 76th Gen. Assem., Reg. Sess., 1995; H.R. 339, 77th Gen. Assem., Reg. Sess., 1997); Maine (S.B. 937, 1st Leg. Sess., 1997); Maryland (S. 445, Leg. Sess., 1996); Massachusetts (S. 937, Leg. Sess., 1997); Michigan (H.R. 5808, 88th Leg., Reg. Sess., 1995; H.R. 4660, 89th Leg., Reg. Sess., 1997); Minnesota (H.R. 2804, 78th Leg., Reg. Sess., 1994); Missouri (H.R. 1720, 87th Leg., 2d Reg. Sess., 1994; H.R. 923, 89th Leg., 2d Reg. Sess., 1998); Nebraska (L.B. 367, 94th Leg., 1st Sess., 1995; H.R. 175, 95th Leg., 1st Sess., 1997); New Hampshire (H.R. 1105, Leg. Sess., 1997); New Jersey (H.R. 5159, 205th Leg., 1st Reg. Sess., 1992); North Dakota (H.B. 1192, 54th Leg. Sess., 1995); Pennsylvania (H.R. 949, 179th Gen. Assem., Reg. Sess., 1995); South Carolina (S. 160, Statewide Sess., 1995; H.R. 4706 Statewide Sess., 1994); Vermont (H.R. 735 Adjourned Reg. Sess., 1996; H.R. 690, Leg. 65th Adjourned Sess., 1997); Washington (H.R. 1098, 54th Leg. Sess., 1995); Wisconsin (A.B. 702, 92nd Leg., Reg. Sess., 1995); Wyoming (H.R. 308, 53rd Leg., Gen. Sess., 1995; H.R. 127, 54th Leg., Gen. Sess., 1997).

model agricultural product disparagement statute is provided in Appendix 1.

FIGURE 1:

AGRICULTURAL PRODUCT DISPARAGEMENT LEGISLATION



Note: Hawaii and Alaska have not considered legislation. Numbers indicate the order of passage.
An asterisk indicates a state that has considered but not passed legislation.

Agricultural product disparagement laws have received their share of national attention. In the popular media, these laws have become fodder for humorous characterizations such as "veggie libel" laws,[5] or "banana bills."[6] Journalists in the popular media have generated headlines such as "Legislators Prove They Are Bananas,"[7] and "Bad-Mouthing Food Can Land You in the Frying Pan,"[8] and statements such as "don't dis your vegetables."[9] Recently, agricultural product disparagement statutes received even more national coverage by the lawsuit brought by a group of Texas cattle ranchers against popular television talk show host Oprah Winfrey.[10]

Whether they are characterized as veggie libel or other sarcastic monikers, the agricultural product disparagement statutes are remarkably similar. Although the laws are analyzed in more depth in Chapter Two, a brief overview here is worthwhile. Typically, the laws proscribe publication of "false information that a

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[5]Clarence Page, "'Veggie Libel' Law Good for Emus, Bad for People," *Grand Rapids Press*, 3 March 1998, A7.

[6]David Segal, "When a Put-Down of Produce Could Land You in Court," *Washington Post*, 27 May 1997, E1.

[7]Gary Stein, "Legislators Prove They Are Bananas," *Sun-Sentinel*, 28 March 1994, 1B. Other examples include: John Sanko, "Nader Gives Bill the Raspberries: Consumer Advocate Joins Attack on Measure Giving Libel Protection to Perishable Goods," *Rocky Mountain News*, 8 March 1998, 14.

[8]"Bad-Mouthing Food Can Land You in the Frying Pan," *Times Union*, 29 December 1997, A2.

[9]Segal, "When a Put-Down Could Land You in Court," E1. Others have described an agricultural disparagement bill as the "much-guffawed veggie bill..the one that said Thou Shall Not Take the Name of Veggie, Fruit or Other Perishable Product in Vain." Sanko, "Nader Gives Bill the Raspberries," 14.

[10]Texas Beef Group v. Winfrey, 11 F. Supp. 2d 858 (N.D. Tex. 1998).

perishable agricultural product is not safe for human consumption."[11] In most states, whether information is "false," depends on the state of scientific evidence.[12] For example, in Georgia information is "false if it is not based upon reasonable and reliable scientific inquiry, facts, or data."[13] Once so-called "false" information about farm produce is disseminated to the public, a cause of action for civil damages becomes viable. Agricultural product disparagement legislation has a unique history. The genesis of this novel approach to policy lies in an older controversy over a growth regulator commonly known as Alar.

Resoundingly, qualitative research has attributed the rise of agricultural product disparagement legislation to what is now know as the "Alar incident," or "Alar scare" of 1989. Alar is the trade name for daminozide,[14] a growth regulator introduced for food-crop usage in 1968.[15] Alar became infamous for its use on

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[11]Fla. Stat. Ann. § 865.065.

[12]*Ibid.* For example, Alabama's food disparagement law defines false information as that which "is not based upon reasonable and reliable scientific inquiry, facts, or data." Al. St. § 6-5-621. However, Idaho and Oklahoma do not use a scientific standard of falsity. Idaho Code § 6-2003; 2 Okl.St. Ann. § 3010.

[13]Ga. Code Ann. § 2-16-2.

[14]The chemical composition of daminozide is: succinic acid monoC2,2-dimethylhydrazide, $(CH_3)_2NNHCOCH_2CH_2CO_2H$). Alan R. Newman, "The Great Fruit Scares of 1989," *Analytical Chemistry* 61 (1989): 861A-863A. Daminozide is the common chemical name. Its first usage in the United States was in 1963 for potted chrysanthemums. Ronald E. Gots, *Toxic Risks: Science, Regulation, and Perception* (Boca Raton: Lewis Publishers,1993), 15.

[15]Charles R. Santerre, Jerry N. Cache, and Matthew J. Zabik, "The Decomposition of Daminozide (Alar) to Form Unsymmetrical Dimethylhydrazide in Heated, pH adjusted, Canned Solutions," *Journal of Food Protection* 54 (March 1991): 225-91.

apples,[16] but was also applied to a variety of other fruits and vegetables,[17] such as peanuts, peaches, pears, cherries, blueberries, nectarines, cranberries, grapes, tomatoes, and brussels sprouts.[18] Alar promoted uniform red color on apples, controlled flowering, delayed ripening, prolonged length on trees, and extended post-harvest storage life.[19] The apple industry used about seventy-five percent of the total Alar supply in the United States.[20] Alar was manufactured exclusively by Uniroyal Chemical Company (Uniroyal).[21]

Alar became a household name after an estimated 50 million Americans watched a CBS broadcast about agricultural chemicals.[22] On February 26, 1989,

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[16]Pesticide Tolerance for Daminozide, 54 Fed. Reg. 6392 (1989).

[17]John Wargo, *Our Children's Toxic Legacy: How Science and Law Fail to Protect Us From Pesticides* (New Haven, CT: Yale University Press, 1996), 116.

[18]Michael Fumento, *Science Under Siege* (New York: Morrow, 1993); Santerre et al, "The Decomposition," 226 ; M.J. Mattina, H.M. Pylypiw, Jr., and A.A. Paiva, "Daminozide Residues in Apple Orchards: Concentrations in Fruit, Trees, and Soil," *Bulletin — Environmental Contamination Toxicology* 45, no. 6 (December 1990): 858-63.

[19]Mattina et al., "Daminozide Residues" 860; Bruce Ames and Lori Gold, Letter, *Science* 244 (1989): 755-56; Alan R. Newman, "The Great Fruit Scares," *Analytical Chemistry* 61 (July 15, 1989): 881A-63A; Leslie Roberts, "Alar: The Numbers Game," *Science* 243 (March 17, 1989): 1430; Andrea Arnold, *Fear of Food: Environmental Scams, Media Mendacity, and the Law of Disparagement* (Bellevue, WA, Free Enterprise Press, 1990).

[20]Sheila Jasanoff, *The Fifth Branch* (Cambridge, MA, Harvard University Press, 1990), 141.

[21]"Bye-Bye Alar," *Science* 135 (June 10, 1989): 358.

[22]Doug Haddix, "Alar as a Media Event," *Columbia Journalism Review* 28 (1990): 44-45. Six out of ten surveyed Americans believed apples were bad for one's health following the CBS program. Arnold, *Fear of Food*, 69. Reports about Alar followed the CBS program. USA Today, The Today Show, the Phil Donahue Show, USA Today Television, Entertainment Tonight, ABC's Home Show, Woman's Day, Redbook, Family Circle, Organic Gardening, Consumer Reports, and People Magazine all ran stories on Alar. Arnold, *Fear of Food*, 5.

the 60 Minutes broadcast, "'A' is for Apple,"[23] highlighted the National Resource Defense Council's (NRDC's) conclusions about the potential risks daminozide posed to children who ate apples and apple products.[24] The show focused on a report published by the NRDC, *Intolerable Risk: Pesticides in Our Children's Food.*

Alar was described in the program as "the most potent cancer-causing agent in the food supply today," and suggested that children faced an increased risk of contracting cancer if they consumed apples.[25] As stated by the NRDC: "What we're talking about is a cancer-causing agent used on food that EPA knows is going to cause cancer for thousands of children over their lifetime."[26] A spokesperson for the NRDC stated that Alar is responsible for an "estimated 240 deaths per million population among children who are average consumers of Alar-treated food and a whopping 910 per 1,000,000 for heavy consumers."[27] The NRDC also argued that Alar would cause an annual 5,200 to 6,200 additional cases of preschooler cancer.[28]

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[23]"Pesticides: Washington Growers Sue CBS, NRDC for Product Disparagement of Red Apples," *Chemical Regulation Reporter* 14 (January 25, 1991): 1530; Auvil v. CBS, 800 F. Supp. 928 (1992); Auvil v. CBS, 67 F.3d 816 (1995).

[24]The initial program was followed up in two subsequent 60 Minute program segments, one on March 5, 1989, and the other on May 14, 1989. Arnold, *Fear of Food*, 74.

[25]Auvil v. CBS, 800 F. Supp. 928 (1992).

[26]Auvil v. CBS, 800 F. Supp. 928, 938 (1992).

[27]CBS's *Sixty Minutes*, Sept. 26, 1989.

[28]The report's allegations about the risks posed by the fungicides captan, chlorothalonil, folpit, and mancozeb were not mentioned in the CBS program. See Jasanoff, *The Fifth Branch*, 148.

When the CBS program aired, EPA had already classified Alar as a probable human carcinogen, and was in the process of re-evaluating its regulation of the pesticide.[29] One of the compound's metabolites, 1,1-(unsymmetrical) dimethylhydrazine (UDMH) was believed to cause tumors in mice.[30] Alar contains about one percent UDMH,[31] and hydrolyzes into additional UDMH when heated,[32] as is commonly required for pasteurization of apple juice and applesauce,[33] or when ingested in the stomachs of mammals.[34]

Following the airing of the 60 Minutes program, there was a public Alar scare: American consumers stopped buying apples and school districts refrained from serving them.[35] The basic information about Alar found in the 60 Minutes report was repeated in numerous popular media sources, such as Good Housekeeping, Redbook, and the Phil Donohue Show. Public opinion about the risk of Alar by and

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[29]Pesticide Tolerance for Daminozide, 54 Fed. Reg. 6392 (1989); 51 Fed. Reg. 12, 889 (1986); 57 Fed. Reg. 46436, 46437-46440 (1992).

[30]Newman, "The Great Food Scares," 861A. Studies also demonstrated that tumors did not appear in rats. *Ibid.* Alar studies have been the subject of much debate. For a discussion critical of the studies, see Michael Fumento, *Science Under Siege* (New York: Morrow, 1983), 22-24. For a more positive view of the studies, see Adam M. Finkel, "Alar: The Aftermath," *Science* 255 (1992): 6664-65.

[31]Robert V. Percival, Alan S. Miller, Christopher H. Shoeder, and James P. Leaps, *Environmental Regulation: Law, Science, and Policy* (Boston: Little, Brown, 1996), 523.

[32]John Wargo, *Our Children's Toxic Legacy: How Science and Law Fail to Protect Us From Pesticides* (New Haven, CT: Yale University Press, 1996), 116.

[33]*Ibid.*, 155.

[34]Percival, *Environmental Regulation*, 523.

[35]Frank B. Cross, "The Public Role in Risk Control," *Environmental Law* 24 (1994): 943; "Apple Panic Overblown Reaction to Inadequate Data, Critics Say," *Chemical Marketing Report* (March 20, 1989): 9.

large mirrored this media coverage (van Ravenswaay and Hoehn 1991). Despite debates over the extent to which Alar had been used apples[36] or the health risks it may have posed,[37] the market for apples took a serious down turn.[38]

By May 1989, the International Apple Institute, to which 90% of American apple growers belonged, recommended that Alar not be applied to apples.[39] At the

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[36]Low estimates are that Alar was applied to only 5% of the apple supply, mostly on Red, Golden Delicious, McIntosh and Red Delicious varieties. Ron Arnold and Alan Gottlieb, *Trashing the Economy* (Bellevue, WA: Free Enterprise Press, 1994); Daniel E. Koshland, "Scare of the Week," *Science* 244 (1989): 9. Others place Alar's use on apples at about 15%. Timothy Egan, "Apple Growers Bruised and Bitter After Alar Scar," *New York Times*, 8 July 1991, A1. Higher estimates run from 22 to 55%. Edward Groth, III, "Alar and Apples," *Science* 244 (1989): 755. Consumer Reports published a 1989 article stating that Alar was in 75% of the apple juice it tested. EPA's 1989 estimate was first 5% then revised to 15%. Alan R. Newman, "The Great Fruit Scares of 1989," *Analytical Chemistry* 61 (July 15, 1989): 861A-63A.

[37]Kuran and Sunstein write that EPA's review of the evidence following the 60 Minutes broadcast showed that "the risk was vastly exaggerated; one in 111,000 rather than one in 4,200." Timur Kuran and Cass R. Sunstein, "Availability Cascades and Risk Regulation," *Stanford Law Review* 51 (1999): 683-768. Subsequently the EPA concluded that the risk was one in 250,000 children exposed to Alar were likely to develop cancer. General Accounting Office, *Toxic Chemicals, Report to Congress*, 1991. EPA's final report on Alar classifies it and UDMH as a probable human carcinogen. Gots, *Toxic Risks*, 23, and USEPA, Memorandum on the Third Peer Review of Daminozide and Its Metabolite Breakdown Product of 1,1-Dimethyhydrazide (1991). EPA appears committed to its anti-Alar position. V.J. Kimm, "Alar's Risks," *Science* 254 (1991): 1276. Whether Alar posed a health risk warranting removal from the market was and remains a controversial issue. NRDC remains committed to its original report, *Intolerable Risk*. Linda Ashton, "Alar Scare 10 Years Old, but Issue Still Controversial," *Associated Press*, 1 March 1999. Some remain supportive of the NRDC's report. David Rall, and Philip J. Landrigan, "Of Apples and Alar," *Washington Post*, 13 January 1998, A14. Others have vigorously argued that fears about Alar were not scientifically justified. Bruce Ames, and Lori Gold, Letter, *Science* 244 (1989): 755-57. The British government does not consider Alar a serious threat, although Uniroyal stopped all food-product usage sales, including overseas.(Gots, *Toxic Risks*, 24) The United Nations also considers Alar safe for usage on food products when used in its prescribed manner. Kuran and Sunstein, "Availability Crusades," 690. Research continued to show mixed results after 1989. Santerre et al. 1991 published a report showing that UDMH forms at much lower rates than had been reported in previous studies. Santerre, Cache, and Zabik, "The Decomposition of Daminozide," 230. Just prior to the CBS program, on February 1, 1989, EPA that daminozide was "statistically negative for cancer response," (Arnold, *Fear of Food*, 70), although the EPA still categorizes Alar as a potential carcinogen. Eliot Marshall, "A is for Apple, Alar, and...Alarmist?" *Science* 254 (1991): 20-2..

[38]"Pesticides: Washington Growers Sue CBS, NRDC for Product Disparagement/Red Apples," *Chemical Regulator Reporter* 124 (1991): 1530.

[39]Newman, "Great Fruit Scares," 863A.

same time, Congress was in the process of considering a bill which would cancel Alar's registration.[40] EPA had also made a preliminary decision to cancel all food-use registrations of Alar.[41] On February 1, 1989, the EPA asked Uniroyal to stop marketing the pesticide. In June 1989 sales of Alar were stopped by Uniroyal.[42] Subsequently, in October 1989, Uniroyal requested cancellation of food crop registration for Alar.[43] EPA's cancellation order became effective on November 17, 1989.[44] Agricultural interests blamed the Alar incident on lost sales;[45] loss estimates have ranged from 100 million[46] to 250 million[47] or more.[48] Others disputed those figures, arguing that the loss estimates were exaggerated.[49] Today, the Alar

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[40]Gots, *Toxic Risks*, 24.

[41]54 Federal Register 22,588 (1989).

[42]"Pesticides: Washington Growers Sue CBS," Chemical Regulator Reporter, 1530. Once the pesticide was scheduled for withdrawal, the risk assessment studies were halted. Arnold, *Fear of Food*, 99-100.

[43]"Pesticides: Washington Growers Sue CBS," 1530. Food-product usage of Alar was phased out by 1993. Wargo, *Our Children's Toxic Legacy*, 101.

[44]54 Federal Register 47,493 (1989).

[45]Gary Acuff, "Alar Saga: New Chapter or End of Story?" *American Fruit Grower* (August 30, 1992): 9.

[46]Ashton, "Alar Scare."

[47]Elizabeth Whelan, *Toxic Terror* (Amherst, NY: Prometheus Books, 1993), 22.

[48]For example, Michael Fumento, argues that the economic toll may be much higher due to foreclosures and bankruptcies following the Alar incident. Michael Fumento, *Science Under Siege* (New York: Morrow, 1993), 35. In contrast, some have argued that the apple industry was already in trouble at the time the of the Alar incident, that the downturn only lasted for a period of a few months, and that the two years following the incident yielded bumper crops with corresponding record-high prices. Paul R. Ehrlich, and Anne H. Ehrlich, *Betrayal of Science and Reason* (Washington, DC: Island Press, 1996), 127.

[49]Linda Ashton, "Alar Scare."

incident remains controversial. The NRDC stands behind its original report,[50] while there is a plethora of negative publicity characterizing the incident as a needless and costly scare tactic by radical environmentalists.[51]

In response to the lost revenues purportedly caused by the Alar incident, in late 1990, forty-six hundred apple growers sued CBS and the NRDC in Washington.[52] Since the State of Washington (or any other state for that matter) did not have a agricultural product disparagement statute, plaintiffs sued, inter alia, under the common law tort of trade disparagement.[53] They were not successful, however, since the court held that the plaintiffs had not proven that the statements made during the 60 Minutes' broadcast were false, as required under common-law product disparagement.[54] When the door to the courts closed, however, the growers knocked on the doors of their legislators. Beginning in Colorado, legislative committees put agricultural product disparagement regulation on their agendas.[55] The process by which states considered and passed legislation is the subject of this dissertation. The more specific research objectives are addressed below.

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[50]Linda Ashton, "Alar Scare."

[51]Ron Arnold and Alan Gottlieb, *Trashing the Economy* (Bellevue, WA: Free Enterprise Press, 1994), 55.

[52]Megan W. Semple, "Veggie Libel Meets Free Speech: A Constitutional Analysis of Agricultural Disparagement Law." *Virginia Environmental Law Journal* 15 (1995-1996): 403-42.

[53]Auvil v. CBS '60 Minutes,' 67 F.3d 816, 820 (9th Cir. 1995).

[54]*Ibid.*

[55]Semple "Veggie Libel Meets Free Speech," 411. Although the Colorado house and Senate approved a food product disparagement bill, the governor vetoed it.

Research Objectives

This dissertation examines the political process of an innovative change in public policy in the form of agricultural product disparagement legislation. The objectives of this research are to provide:

– An explanation about the factors that influence a state legislature to develop new environmental policy in the form of agricultural product disparagement legislation;

– Insight into environmental decisionmaking in the context of scientific uncertainty;

— Insight and empirical findings relevant to interest group theory;

– A model for predicting which states are likely to innovate in the future by passing an agricultural product disparagement bill;

– Results to compare with other studies of environmental policy innovation, and;

— Results to compare with other state policy studies.

The study does not examine other health or environmental policies or laws, but in the interest of a more thorough understanding and analysis, focuses exclusively on agricultural product disparagement legislation, laws that are almost identical from state-to-state. Generally, agricultural product disparagement laws prohibit defamatory speech about agricultural products. (A more detailed discussion of these laws is provided in Chapter 2) They are unique, then, in American law inasmuch as they attempt to restrict discussion about a topic of public interest, food safety. Below is a review of prior research relevant to public policy formation

generally. Research that focuses on legislative adoption of new policies is highlighted. Particular attention is also focused on the more limited literature dealing with public policies regarding environmental issues.

Literature Review: Related Research on State Policy Formation

Empirical studies of the factors that act as determinants of policy adoption have focused on diverse topics, for example: tax policy (Hansen 1983; Berry and Berry 1990), welfare policies (Dawson and Robinson 1963; Grogan 1994), and health care (Buchanan and Ohsfeldt 1993) In environmental policy literature, again, a wide array of topics are represented, for example: air quality (Lowry 1992; Ringquist 1993), groundwater protection policies (Regens and Reams 1988; Bloomquist 1991), hazardous waste (Lester et al. 1983; Atlas 1998), and recycling (Khator 1993). Focusing on a particular type of law (as opposed to a broader policy issue) has also been modeled in prior research, such as laws that govern living wills (Glick and Hays 1991), the right to die (Hoefler 1994), school choice (Minstrom and Vergari 1998), mandatory seat-belts (Burke 2000), sodomy (Nice 1994), same-sex marriage (Haider-Markel 2001), and state lotteries (Winn and Wicker 1990).

Quantitative comparative state policy research generally includes two broad categories of variables, political and socioeconomic (Gray 1990; Hwang and Gray 1991; Berman and Martin 1992; Hero and Tolbert 1996).[56] In addition to political

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[56]Some researchers remain committed to economic factors as the sole determinants of policy. Thomas R. Dye, *Politics, Economics, and the Public Policy Outcomes in the American States* (Chicago: Rand McNally, 1966). In more recent research, however, Dye has incorporated political variables. Thomas R. Dye, *American Federalism: Competition Among Government* (Lexington, MA: Lexington Books, 1990).

and socioeconomic variables, some researchers have also used data to test a state's innovativeness, or the state's ability to change policy. Some researchers consider innovation research outside the political-socioeconomic format used by most state policy studies (Boeckelman 1991, 49-50). Innovation refers to a policy that is new to a state adopting it (Walker 1969). Innovation spreads through a process known as "diffusion" (Rogers 1962, 13; Walker 1969). Much of the political science diffusion literature focuses on the adoption of laws (Walker 1969; Gray 1973; Berry and Berry 1992; Mintrom 1997). In his seminal work, Walker theorized that states learn from and emulate neighboring states; thus policy spreads state-to-state in ink-blot fashion (Walker 1969; Walker 1973: 1187; Foster 1978). Adoption by neighboring states is thought to reduce obstacles to innovation for subsequent adopting states (Berry and Berry 1990).

Other studies have found similar "follow-the-leader" patterns among neighboring states (Light 1978; Lutz 1987; Filer et al. 1988; Berry and Berry 1990, 1992; Mooney and Lee 1995; Stream 1999; Mooney 2001). Over time, the frequency of adoption of innovations is normally distributed (Rogers 1962, 1983; Gray 1973: 1175; Mahajan and Peterson 1985).[57] In a frequently-cited study, Savage (1978) created a numerical scale to measure a state's propensity to innovate. Some states, he hypothesized, are more likely to develop and implement new policies. In these states, citizens are more demanding than in other states. His

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[57]The significance of the normal curve has been questioned. Frances Stokes Berry, and William D. Berry, "Tax Innovations in the States: Capitalizing on Political Opportunity." *American Journal of Political Science* 36 (1992): 715-42.

innovativeness scale has been used subsequently by other researchers with varying results (Reams 1990; Mooney and Lee 1995). Mooney and Lee found that innovativeness did not help explain the passage of abortion-reform measures while Reams found that innovativeness was positively associated with the development of water-quality programs. In addition to the popular Savage scale, other researchers have created different measures of innovativeness. Canon and Baum (1981), for example, used a compilation of various changes in tort law to rank states overall innovativeness.

Many scholars have argued that patterns of diffusion vary by the policy at issue (Eyestone 1977; Mahajan and Agarwal 1977; Welch and Thompson 1980; Savage 1985; Glick and Hays 1991). Gray (1977), for example, found that some policies diffuse regionally while others do not. Specifically, education laws diffuse in regions, but civil rights laws and welfare laws do not. This body of research, then, tends to debunk the research cited previously that reported the ink-blot phenomenon of policy adoption. Whether, and under what circumstances the ink-blot phenomenon exists remains an open question, given the state of the literature. Accordingly, scholars have tried to test any underlying explanations of diffusion patterns. This requires adding other relevant variables to their models.

Thus, today, innovation research frequently includes political and socioeconomic variables along with a measure for innovativeness (Reams 1990; Berman and Martin 1992). As Regens (1980a) found, contextual factors may be the most significant independent variables. Similarly, Eyestone largely rejected the idea that one could generalize about regional patterns of diffusion. Rather, he

hypothesized that adoption was dependent upon three factors: "some intrinsic properties of the policy, a state's politics, and emulative (interaction) effects."(442) Eyestone found that states may be following federal leads in the adoption of new policies. States used the federal Fair Labor Standards Act, for example, as a model for similar state labor laws.(446)

The question of whether or not other variables can more fully explain a state's action was also explored by Daniels and Regens (1980). They found that an opposition group can block the passage of an innovative policy. This finding was confirmed by Nice (1984). While finding that larger, more industrialized states often show a relatively consistent history of policy innovation, Nice also found that a strong opposition group can thwart adoption of innovations. This finding was replicated by Mintrom (1997). He found that the presence of a teacher's union strong opposition could chill passage of school-choice laws. Collectively, these studies demonstrate that state policy innovation is not easily subject to generalization, or particularly neat models.

In the 1990s, innovation research continued to receive attention. Like some of their predecessors, Berry and Berry (1992) were critical of innovation research that considered diffusion in the absence of other internal determinants. In their study, although they observed regional patterns of emulation, they also found that other factors could explain adoption rates. Income, degree of urbanization, and inter-party competition, were all found to correlate with innovation. Yet Glick and Hayes (1991, 848) confirmed Walker's findings once again. In their study of the adoption of living will laws, they found that the laws were adopted in regional

patterns. This study also confirmed the normal, S-shaped pattern of adoption previously found in other studies. Again, the significance of regional patterns of adoption requires more research if any definitive answers are to be found.

Khator's (1993) study of recycling innovativeness also confirmed Walker and Gray's opinion that policy innovators tend to be trend setters or leaders. In his study, Khator found that states that were considered innovative generally, were also innovative with respect to recycling programs. In their study of the adoption of pre-*Roe* abortion legislation, Mooney and Lee (1997, 604) found that Southern and Pacific states adopted laws in groups. Other research which explored the geographic patterns of innovation and neighboring state adoptions include Walker (1969), Foster (1978), Berry and Berry (1990), and Glick (1992). However, not all studies have reported significant regional patterns of emulation (Canon and Baum 1981). In addition to the effect of emulation, Mooney and Lee accounted for other internal and contextual variables, such as demand for reform, religion, wealth, urbanization, party competition, election year, and innovativeness, all of which were associated with abortion law reform.

Mintrom (1997) added to the research in diffusion studies by looking at adoption of school-choice laws. In considering the factors that influence adoption, Mintrom included the influence of election year, party control of the legislature and governorship, and the presence or absence of a policy entrepreneur ("people who seek to initiate dynamic policy change.")(739) He concluded that new policies were less likely to be adopted in an election year, but that party control had little influence on whether or not a law was adopted.(756) An advocate or policy entrepreneur also

facilitated the adoption of school-choice laws. Theoretically, policy entrepreneurs are thought to be key players in influencing public policy output (Pertschuk 1982; Wilson 1989; Quirk 1990).

As innovation research evolved, scholars tested additional or different variables in addition to regional patterns and a state's propensity to develop new policy. Some of these additional variables have been highlighted above. Perhaps one of the most commonly-used variables in the Political Science literature is political ideology (Englebert 1961; Trop and Ross 1971; Clausen 1973; Ritt and Ostheimer 1974; Dunlop and Allen 1975; Mazmanian and Sabatier 1980; Kenski and Kenski 1981; Conover and Feldman 1981; Entman 1983; Poole and Daniels 1985; Gray 2001). According to Farber and Frickey (1991), ideology was a better predictor than economic variables. Ideology has proven a strong predictor in the case of energy policy (Mitchell 1979; Bernstein and Horn 1981), and environmental legislation (Kenski and Kenski 1980). Generally, liberals have been seen as more inclined to advance new policies, favor redistribution of income, and use the state as an engine of societal change (Lester 1980; Klingman and Lammers 1984; Nice 1994:55, 104; Hays et al. 1996). Liberals have usually been considered the leaders in environmental legislation (Dunlop and Allen 1976, 390-95; Buttel and Flinn 1978; Kenski and Kenski 1981).

As Buttel and Flinn found, "upper-middle class liberals find their political views compatible with the pragmatic politics of regulating the private sector to achieve enhanced environmental quality" (Buttel and Flinn 1978, 32). This finding has been confirmed in numerous other studies (Calvert 1979). Hays et al. (1996,

52), for example, found that liberal policymakers were more supportive of environmental policies than their conservative colleagues. Conversely, conservatives have demonstrated a tendency to withhold support for environmental legislation (Calvert 1979, 334, 1989, 175).

At the same time, the use of ideology has not been without its critics. Some researchers have found only weak associations between ideology and environmental policy preferences (Mazmanian and Sabatier 1981, 372). Jackson and Kingdon (1992, 806, 809) suggest that other factors may underlie the finding that ideology is a strong influence. They were also concerned that ideology is usually measured by an indirect source, such as Americans for Democratic Action or ADA scores (Mazmanian and Sabatier 1981, 363; Jackson and Kingdon 1992, 809). Moreover, some researchers have found that ideology is not significant. Bacot and Dawes (1996) found no significant association between ideology and state environmental efforts. Critics have also argued that the role of ideology may vary depending on the particular environmental problem under consideration (McCloskey 1971; Dunlap and Gale 1974; Dunlap and Allen 1976). Holbrook and Percy (1992, 212) considered the affect of ideology on the passage of disability laws. Contrary to their hypothesis, they found that ideology did not influence passage of legislation.

Both the ideology of policymakers and constituents may be relevant (Jackson and Kingdon 1992; Nice 1994). Theoretical research suggests that policymakers will tend to follow the political values of their constituents (Almond and Verba 1989). Limited empirical research supports that theory (Kau, Kennan and Rubin 1982).

Erikson et al. (1993, 90-91) report that "when legislators assess possible public readiness for policy changes on...issues, they may refer to their constituencies' overall degree of liberalism or conservatism." A liberal citizenry, in theory, should affect policy innovation, since a liberal climate should foster policy innovation (Nice 1994). In a liberal state, it is believed that a broader range of issues are recognized and debated by legislatures. Not surprisingly, then, states with liberal citizens tend to have more environmental regulation (Hedge and Scicchitano 1993; McIver et al. 1994; Hays et al. 1996). A liberal citizenry may elect more liberal representatives, and also tend to belong to environmental interest groups (Hays et al. 1996, 56). In contrast, in conservative states, theoretically, less innovation should be expected, given conservatives' "skepticism of social analysis and experimentation and greater belief in traditional values and practices" (Nice 1994, 28).

In one of the more-recognized studies, Wright et al. (1987) considered the extent to which public ideology was reflected in the policy decisions of state legislators. Among their findings was the conclusion that liberal state legislatures, mostly in the Northeast, passed more liberal policies, whereas more conservative state legislatures, mostly in the South, passed conservative policies. McIver et al. (1994, 258) also reported the connection between citizens' ideology and political culture: "Traditionalist states are relatively unresponsive, moralistic states slightly more responsive, and individualistic states most responsive to public opinion." Nice (1994, 116-20) also tested both ideology and political culture in his research on passage of deregulation of sodomy, finding that both ideology, conservatism, and

a particular political culture, traditionalism, are associated with the continued existence of sodomy laws.

As exemplified in the recent work of McIver et al., the literature in which political culture is seen is fairly extensive. Environmental policy studies have included political culture as a variable (Bloomquist 1991). Three traditions were identified in the pioneering work by Elazar: moralistic, individualistic, and traditionalistic (Elazar 1966, 1984; Sharkansky 1969; Miller 1991; Hanson 1991; Opheim 1991). Members of each culture see the role of government differently, and as a result, policies may vary accordingly. As McIver et al. contend, "[m]oralistic states enact more liberal policies, whereas traditionalist states enact more conservative ones" (McIver et al. 1994, 258). Researchers have found that moralistic states innovate more than traditionalist states (Johnson 1976; Gray 1994). Luttbeg (1971) reported the significance of political culture as a predictor of welfare and educational policies. Opheim (1991, 417) concluded that political culture was a strong predictor of a state's willingness to regulate lobbyists. Blomquist (1991) found that states that adopted groundwater policies were more likely to have a moralistic political culture.

Whether political culture is complementary to or redundant with ideology remains an open question. There is obvious overlap in these two sets of variables. In addition to political culture, the variable partisanship or political control may also account for changes in state policy. Currently, there is an on-going debate whether ideology is more important than partisanship (Hays et al. 1996, 49; Ringquist 1993). It is not uncommon to see research testing both ideology and party control

(Mazmanian and Sabatier 1981, 371; Nice 1994, 71; Brown 1995). Early empirical research on party control showed very little promise; party control had little impact on policy (Dawson and Robinson 1963; Dye 1966).

Jennings (1979) work revitalized interest in party control (Brown 1995). Measuring party control has not been consistent though. Some scholars have used only the state legislature as an indicator of party control (Scholz and Wei 1986) while others have used both chambers of the legislature along with the governor's office (Berry and Berry 1992; Grogan 1992; Brown 1995). Other researchers have relied solely on the governor's office as an indicator of party influence (Medler 1989). Yet another measure of party control is a party's percentage share of seats in the legislature (Scholz and Wei 1986). Research has shown mixed results. Some have shown positive relationships between party control and policy innovation (Chubb and Moe 1990; Hwang and Gray 1991; Nice 1994; Mintrom 1997). For example, Berry and Berry (1990) reported a positive association between party control and tax policy innovation. Hansen (1983), though, found no such relationship between tax innovation and partisanship.

Using party control as a variable is, however, grounded in the theoretical literature. Theoretically, Republicans are believed less likely to vote for government expansion (Rossiter 1960, 120-21; Froman 1963, 90-91; Shannon 1968, 72-73), more pro-business (Schattschneider 1960, 43; Rossiter 1960, 93; McCloskey 1971, 406-07), and less willing to use government action to address societal problems (Rossiter 1960, 135; Keefe and Ogul 1964, 274). Englebert argues that Republicans are more concerned with states' rights and the development of natural

resources (Englebert 1961). Business entities commonly contribute to Republican campaigns (Harris 1962, 33-35; Heard 1960, 95-141), and are strongly represented in the Republican party (Harris 1962, chap.2; Rossiter 1960, 93-96; Rose 1967, 116-24). Furthermore, some economic literature reports the detrimental economic effects of environmental regulation (Jorgensen and Wilcoxen 1990).[58]

Theoretical literature has also supported the idea that party control increases legislative output (Cutler 1988; Kelly 1993; Edwards, Barrett, and Peake 1997). Some researchers have empirically tested the hypothesis that party control results in an increase in passage of significant legislation. Mayhew's (1991) study failed to confirm this hypothesis while Kelly (1993), using Mayhew's data, was able to find support for the hypothesis. Binder (1999) also found that the absence of party control reduced the passage rate of significant laws.

Other literature has also established party affiliation as a predictor of policy. Hwang and Gray (1991, 291), for example, wrote that a Democratically-controlled state will spend more on welfare. Yet they also found that party control was not a predictor of other policies, such as highway allocation and educational spending. Nice (1994, 71) found that sunset laws tend to be adopted by states with unified control of the legislature and governorship. Chubb and Moe (1990) and Mintrom (1997) found a positive association between party and support for school choice. Research at the federal level has indicated similar findings. Keefe and Ogul (1985) reported that one-third to one-half of the roll call votes in Congress were partisan

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[58]Other economic research has reached the opposite conclusion. E.F. Denison, *Trends in American Economic Growth, 1929-1982* (Washington, DC: Brookings Institute, 1985).

votes in which a majority of one party votes in opposition to the majority in the other party. Yet for others, party-control did not prove a significant predictor of policy innovation (Berry and Berry 1990; Minstrom and Vergari 1998).

Some research indicates an association between the Democratic party and environmental regulation (Dunlap 1973; Dunlap and Allen 1975; Lester et al. 1983; Calvert 1989; Lester 1980). The seminal piece was published by Dunlap and Gale (1974). They found that party affiliation played a significant role in policy choice. This, they opined, was due to party allegiance (or not) with business interests. While the findings were confirmed in subsequent studies, (Ritt and Ostheimer 1974; Dunlap and Allen 1975; Kenski and Kenski 1980; Calvert 1989; Recchia 1999) other research has challenged Dunlap and Gale's basic finding. Some survey research has failed to find a significant difference in views between Republicans and Democrats on a variety of environmental issues (Kau and Rubin 1979; Kalt and Zupan 1984; Nelson and Silberberg 1987).

Some scholars have also reported that concern for the environment crosses party lines (Lester et al. 1983, 271,276; Wood 1992; Ringquist 1993). Studies have revealed that Republicans can be even more supportive of environmental policies than Democrats (Buttel and Flinn 1978; Mazmanian and Sabatier 1981). This has been partly explained as a reflection on regional differences in ideology within the same party. Southern Democrats, some say, are "policy outliers" (Lester et al. 1983, 261; Wright et al. 1987). Bacot and Dawes (1996) recently reported that Southern states were far more likely to spend less on environmental efforts than states in other regions of the country. Similarly, Kenski and Kenski (1981)

concluded that members of Congress from Southern states are the least supportive of environmental regulation. Economists have also reported regional patterns of policy adoption, albeit not because of ideological reasons. Pashigan (1985) reports that House opposition to the policy of prevention of significant deterioration (PSD) under the 1970 Clean Air Act came from Southern, Western, and rural members of Congress.

Other writers have found that core constituencies within each party vary ideologically from state-to-state, calling into question the proposition that party is a powerful variable (Brown 1995). In the case of governors, consistent patterns across the literature cannot be found (Medler 1989). A report that party strength was not statistically significant is not uncommon (Hofferbert 1966; Lester 1980, 117, 119). One must also heed Jackson and Kingdon (1992, 810) word of caution in interpreting partisanship findings: "[P]arty differences in legislative voting could be due to many things: Constituency differences that are connected to the parties, ideological differences between the parties, support for or opposition to the president and the current administration, differences between coalitions of interest group that support the two parties, and so on."

Thus it may be prudent to include other relevant political variables in one's model. Other popular political variables include party competition, election year, legislative professionalism, political participation, and public opinion and opposition. Party competition has a long and continuous history as a relevant variable in comparative state literature (Carmines 1974; Sigelman and Smith 1980; Lester et al. 1983; Patterson and Caldiera 1984; Garand 1985; Reams 1990; Boeckelman

1991; Holbrook and van Dunk 1993). Competitive states tend to be leaders in policy innovation (Gray 1994). Parties in competitive states are thought to court and align themselves with various interest groups; in order to attract supporters, stated positions on policies are essential (Key 1949; Downs 1957, 111; Lockard 1959; Schattschneider 1960, 80; Dawson and Robinson 1963; Fenton 1966; Hofferbert 1966; Dye 1966; Fenton and Chamberlayne 1969; Fry and Winters 1970; Carmines 1974; Tucker 1982).

Key (1949, 303-10) wrote that one-party systems are more likely to be inactive because the party cannot mobilize support, and more competitive states produce more liberal policies.[59] Moreover, one-party systems are more prone to interest-group capture (Schattschneider 1942, 196). With low party competition, interest groups tend to take-over the policy agenda (Morehouse 1981, 118). Since these initial studies, empirical research has proliferated in this area (Dawson and Robinson 1963; Cnuddle and McGrone 1969; Gray 1973; Ranney 1976; Broh and Levine 1978; Gryski 1980; Portney 1980; Patterson and Caldiera 1984; Barrrilleaux 1986; Holbrook and van Dunk 1993; Nice 1994; Mooney and Lee 1997). Many efforts have yielded positive results, although the effect of competition is sometimes small in comparison to socioeconomic variables (Dawson and Robinson 1963; Dye 1966, 1968, 1984; Holbrook and Percy 1972; Plotnick and Winters 1984).

However, not all party competition research has yielded positive results. Regens and Reams (1988, 63), for example, found that interparty competition was

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[59]This has been challenged. Eric Uslaner, "Comparative State Policy Formation, Interparty Competition, and Malapportionment," *Journal of Politics* 40 (1978): 409-32.

not generally correlated with the adoption of water quality programs. Like political culture, ideology, and partisanship, there has been some dispute over whether party competition masks underlying variables such as party affiliation (Dunlop and Gale 1974; Calvert 1979). Dawson and Robinson (1963) concluded that when certain socioeconomic variables are held constant, the relationship between competition and policy outcome proves spurious. Boyne warns that competition should only be considered if parties compete in that particular policy area[60] (Boyne 1986, 488). These criticisms remain a concern when including party competition as a variable.

Some researchers have published results using election year as a variable (Mieksell 1978; Berry and Berry 1990, 1992; Mooney and Lee 1995; Mintrom 1997; Mintrom and Vergari 1998; Clark 1999; Mooney 2001). Popular policies tend to be passed in election years in order to receive electoral advantage. In contrast, unpopular policies tend to be passed in the year immediately following an election. Mintrom and Vergari (1998), for instance, found that state legislatures were less likely to consider school-choice legislation in election years (Mintrom and Vergari 1998). Similarly, Burke wrote that legislatures were more likely to pass popular measures, such as repeal of a 65 mile per hour speed limit, in election years (Burke 1999). Theoretically, legislative agendas in election years are more circumscribed, and politicians shun sensitive topics (Mintrom 1997, 752). It is not surprising, then, that legislatures tend to avoid abortion legislation (Mooney and Lee 1995, 618-20)

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[60]Other critics of inter-party competition include D. Riley, "Party Competition and State Policymaking: The Need for a Re-examination," *Western Political Quarterly* 24 (1971): 510-13; Edward T. Jennings, "Competition, Constituencies, and Welfare Policies in American States," *American Political Science Review* 73 (1979): 414-29.

as well as changes in the tax code in election years (Berry and Berry 1992; Burke 1999).

While the literature on election year influence is limited, professionalism as a political variable has received considerable attention. Grumm (1971) defined a professional legislature as a competent one; that is, one which is responsive to the electorates needs. Bulanowski (1981) wrote that superior scientific and technical knowledge are the hallmarks of a professional legislature. Theoretically, professional legislatures are supposed to be better able to formulate and implement policy, because of enhanced resources such as policy experts on staff, superior salary and other benefits, the length of legislative sessions, and the number of constituents serviced (Grumm 1971; Carmines 1974; Regens and Reams 1988; Mooney 1994).

Professionalism may be particularly salient in the field of environmental policy, given its inherent complexity (Bulanowski 1981). Grumm's initiative found that professionalism was linked to greater passage of environmental regulation (Grumm 1971). This finding was confirmed in later publications (Perry 1981; Lester et al. 1983; Ringquist 1993a, 1994; Hays et al. 1996). Game found an association between legislative professionalism and passage of air-quality laws (Game 1979, 1980). Subsequently, a similar finding was reported about the link between energy conservation innovation and professionalism (Perry 1981), and electric utility deregulation and professionalism (Ka 2000). Again, Lester et al. (1983) demonstrated that professionalism was a solid predictor for passage of stronger hazardous waste regulations. In non-environmental literature, others have also

reported professionalism as a predictor of innovation in public policy (Gormley 1983; Huemmler 1996; Brudney and Hebert 1987).

However, other researchers have found the absence of a significant association between professionalism and environmental regulation. Ringquist (1993) writes that professionalism is not an explanatory variable in the case of water-quality regulation. Regens and Reams (1980:65) found that professionalism was not strongly associated with the development of most water-quality programs. A similar finding is reported by Recchia (1999) who could not find statistical significance between professionalism and changes to overall environmental commitment. In studies of non-environmental policies, negative results have also been published (Hamm and Robertson 1981). Buchanan and Ohsfeldt (1993) recently reported that legislative experience was not related to AIDS policy attitudes. A similar finding was published by Berry (1994), indicating a correlation near zero between professionalism and various policy simulations. This echoed previous work by Karnig and Sigelman (1975), LeLoup (1978), and Roeder (1979), all of whom reported weak or no association between professionalism and policy outcome.

In addition to professionalism, the public's role in influencing policy has been examined. Theoretically, one must agree with Down's (1957) premise: politicians are in the business of election and re-election, and voters are thought to chose the candidate more closely aligned with their beliefs. Using two variables, political

participation and political opinion,[61] researchers have attempted to capture any association between these political factors and policy outcome. Mazmanian and Sabatier (1981) looked at voter turnout and a coastal commission's subsequent policy choices. They concluded that constituency turnout is a reminder to policymakers about the policy preferences of their constituents. However, they specifically declined to conclude that public participation could be as strong a predictor of a policymaker's choice as indicated by their statistical results (462-63).

Hwang and Gray (1991, 291) found that in states in which citizens participate more in politics, more money is allocated for welfare payments. Recently, Khator (1996, 219) included political participation in his study of recycling policy, but found no significant relationship. As Khator points out, since public participation is in a variety of forms, it is difficult to assess the extent, if any, public participation affects policy outcomes. This elusive quality of public participation has been recognized by researchers. For example, while protests and lobbying are common forms of public participation (Mitchell 1990; Wandesforde-Smith 1990), measurement of these activities may be quite problematic.

In contrast to public participation, public opinion can be measured by surveys and other reliable means (Weissberg 1976; Monroe 1979; Regens 1980a; Page and Shapiro 1983). It has been a fairly popular variable in policy studies (Erikson 1976; Kuklinski 1978; Calvert 1979; Mazmanian and Sabatier 1980; Regens 1980b; Blair

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[61]Some researchers have categorized public opinion as a variable outside the political/socioeconomic grouping. Here, I do not, as it unnecessarily complicates the variable classification schema.

and Savage 1981; Wright et al. 1987; Boeckelman 1991; McIver et al. 1994), although the focus has been on policymaking at the federal level (Wright et al. 198, :981). Public opinion and policy studies are supported by a rich set of theoretical literature (Froman 1963: Shannon 1968; Clausen 1973). One might expect that representatives would at least consider constituency preferences out of self-interest (re-election and popularity), or out of a sense of duty. On the national level, strong correlations between citizens' preferences and Congressional voting behavior have been reported (Schwarz, Fenmore, and Volgy 1980; Erikson and Wright 1980; Page et al. 1984). Yet results are not consistent. Page, Shapiro, Gronke, and Rosenthal (1984) found only a modest correlation between constituents' preferences and their legislators' votes.

Until about the 1980s, state opinion and policy research suffered from indirect measures of public opinion (Wright et al. 1987, 983). Weber et al. (1972) simulated public opinion, and found in that preliminary study that public opinion should be strongly related to policy. Nice (1972) inferred public opinion based on voters' preferences in the Nixon-McGovern presidential election, and again found policy responsive to public opinion. Subsequently, Plotnick and Winters (1985) used yet another indirect measure of public opinion, namely charitable contributions.

These indirect measures did little to explain policy (Plotnick and Winters 1985). However, Wright et al. (1987, 996-97; 1994) found that public opinion measured by ideology was related to corresponding policies in the areas of the Equal Rights Amendment, Medicaid, state lotteries, and state income tax. This work is generally recognized as reviving state opinion-policy research (Boeckelman

1991, 49-50). The Wright et al. index of public opinion was subsequently used by Boeckelman (1991). He found, however, that economic initiatives were not influenced by public opinion, but by economic change (57). Boeckelman is not the only state policy researcher to conclude that public opinion could not account for any significant variance in policy (Bacot and Dawes 1996). In an early study, Calvert (1979:335) had found that Republican representatives were further from constituency' preferences than Democrats, meaning that environmental policies preferred by citizens were usually not the choice of Republican representatives. Regens (1980a) concluded that public opinion about energy issues was largely irrelevant to the actions of policymakers.

The support or opposition by interest groups is another variable that frequently appears in state policy research (Crenson 1971; Moore and Newman 1975; Daniels and Regens 1980; Sylves 1982; Reams 1990; Berman and Martin 1992; Grogan 1994; Bacot and Dawes 1996; Mintrom 1997; Mintrom and Vergari 1998). The theoretical research on interest group politics is rich. Generally, theoretical research is premised upon the belief that political groups, or factions, to use the classical term, compete for promotion of policies beneficial to their particular group (Michels 1915; Mosca 1939; Madison 1961). Empirical studies also find theoretical support from Stigler (1971) and Peltzman (1976) who wrote that elected officials support those interest groups believed to hold power for the purposes of re-election. The Wiggins et al. (1992) research suggested that as interest groups become involved in and support a change in public policy, the likelihood of policy change increases. Perhaps more importantly, they concluded that the opposition

of an interest group can be even more effective in defeating legislation (than supporting the passage of a bill).

Other empirical research has reported that states with active environmental interest groups tend to pass more environmental regulation (Hays et al. 1996; Lester and Bowman 1989), have more pro-environmental policies (Recchia 1999), or allocate resources toward environmental efforts (Bacot and Dawes 1996). Daniels and Regens (1980) found that a strong lobby could adversely influence policy formation. Non-environmental policy research has also used interest groups as a variable. Hays et al. (1996:52) reported that "environmental commitment is a function of pressure for greater commitment from both environmental groups and manufacturing interests, as well as from liberal policymakers and professional legislatures." In considering interest groups' pressure for water pollution control programs, Ringquist (1994, 36) found that the most important influences are "the strength of the mining industry, the agricultural sector, and environmental groups in a state." Recchia (1999) replicated the finding that the presence of environmental groups can affect positively progressive environmental policies. In contrast, Reams (1990, 121) found no influence of environmental groups on most state water-quality policies. Similar findings were reported by Lester, Bowman, and Kramer (1983); Williams and Matheny (1984), and; Davis and Feiock (1992).

Recently, Grogan (1994) looked at the influence of interest groups in shaping welfare policy. In his study, Grogan found that the strength of health-care provider groups was positively related to state's liberal welfare policies. Mintrom and Vergari (1998), however, had mixed results. Organized opposition did not seem to effect

legislative consideration, or agenda setting, but did have influence at the stage when the legislature was considering adoption of school-choice legislation. This variable, as most, has not been without its critics. Lester (1980) noted the difficulty in efforts at measurement, citing its lack of success in two prior studies, Zeller (1954) and Weber and Shaffer (1972). As noted by Hrebenar and Thomas (1992), the strength of interest groups varies from state-to-state. Thus, more empirical research may provide insight into this phenomenon.

Political factors that are relatively peculiar to environmental policy should also be considered. Past research has identified bureaucratic strength (Khator 1993), environmental commitment (Dye 1973; Game 1979; Curtis and Creedon 1982; Reams 1990; Miller 1991; Khator 1993; Koontz 2001), and environmental controls (Regens and Reams 1988) as possible variables. Khator (1993) reports a positive relationship between environmental bureaucratic strength and recycling programs. Similarly, Koontz (2001) found that environmental commitment was the only explanatory variable in a state's willingness to adopt innovative ecosystem management programs. In contrast, Reams (1990) found no association between environmental commitment and state water-quality programs.

In addition to political variables, contemporary research has usually included socioeconomic variables as well. Affluence may be the most commonly used socioeconomic variable (Dawson and Robinson 1963; Dye 1966; Dyson and St. Angelo 1973; Carmines 1974; Calvert 1979; Daniels and Regens 1980; Hwang and Gray 1981; Erikson et al. 1993; Berry and Berry 1994; Mooney and Lee 1997; Atlas 1998; Mooney 2001). The literature includes numerous studies reporting a

relationship between level of wealth and policy change (Wright et al. 1987, 992; Erikson et al. 1993, 85), including innovative environmental policies (Feiock and Rowland 1990; Lester and Lombard 1990; Davis and Feiock 1992). Affluence may be seen as a function of citizenry income or wealth (Sigelman and Smith 1980), or some form of a state's wealth, such as its relative economic position (Blomquist 1991; Hwang and Gray 1991; Mooney 2001), or change in economic conditions within the state (Boeckelman 1991).

Some have found affluence to be the strongest predictor of policy (Jennings 1979; Sigelman and Smith 1980), and at times it is the only socioeconomic predictor (Strickland and Whicker 1992, 607).[62] In their pioneering work, Dawson and Robinson (1963) found that income and party competition influenced welfare expenditures. States with larger percentages of poorer citizens may be less committed to environmental protection. Lester et al. (1983) found less hazardous-waste regulation in poorer states. Like most variables, there is not always a positive association between wealth and environmental policy innovation (Rosenbaum 1976; Lester et al. 1983).

Other researchers have found that wealthier states pass more environmental regulation (Bowman and Kearney 1988; Lester 1994). Hays et al. (1996) found that states with greater fiscal health were more likely to pass environmental regulations. Ringquist's (1993) study of air-quality regulations yielded positive associations

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[62]Interestingly, Mooney and Lee found no relationship between a state's effort to reform abortion laws and state wealth. Christopher Z. Mooney, and Mei-Hseien Lee, "Legislating Morality in the American States," *American Journal of Political Science* 39 (1995): 599-627.

between citizens' higher income and a higher rate of regulation. Similar findings have been published for air and water pollution policies (Lowry 1992), and environmental protection in general (Hedge and Scicchitano 1993). Consistent with these quantitative studies, survey research of public support for the environment and wealth indicates that as per capita income increases, citizens are more willing to support environmental expenditures (Elliott et al. 1995). Prior research also indicates that higher levels of public support for environmental legislation comes from the citizens who have higher levels of income and education (Dillman and Christenson 1972; Buttel and Flinn 1974; Milbraith 1984; Inglehart 1995). Recchia (1999) found that while educational level was not a significant predictor of environmental policy innovation, wealth was.

Non-environmental research generally indicates the same pattern of income and policy connectedness. Allen and Clark (1981) found that wealthier states were the first to adopt lobbying regulation. Hwang and Gray (1991) found wealthier states more likely to spend money on welfare, education, and highways. Like most variables, affluence, too, has seen mixed results (Daniels and Regens 1980; Regens 1980a), and even negative results (Rosenbaum 1976; Blomquist 1991; Mooney and Lee 1992).

However, Wright et al. (1987, 992) caution against drawing erroneous conclusions about the income indicator. To their minds, income is inextricably intertwined with ideology. Wealthy individuals do indeed tend to be more conservative (Erikson et al. 1980, 80). Yet, depending on the policy at issue, ideology and affluence do not necessarily coincide. In other words, wealth and

conservative views, or poverty with liberal views, are not always supported by the findings of empirical research. In his recent study, Nice (1994, 59) found that conservative states were in favor of innovative policy, namely a balanced budget amendment, but wealthier states were not. There was also a split on de-regulation of sodomy. Wealthier states were in favor, while more conservative states were not (119-20).

In some cases, the divergence between ideology and resources may be explained by the concept of "slack resources" (Nice 1994; Walker 1969). That is, wealthier states have more resources to devote to social or environmental problems (Nice 1994). As observed by Edwards and Sharkansky (1978, 220) wealthier states also tend to have more professional bureaucracies, including well-educated, professional employees. Conversely, limited state resources may restrict policy options (Reams 1990, 14). Or, it may also be that because income and education are ordinarily related, and because higher educated individuals generally demand more environmental protection (Dunlop and Gale 1974), the divergence can be explained (Reams 1990, 15).

Two other socioeconomic variables, industrialization and urbanization, have also been included in policy studies with steady and common frequency (Dawson and Robinson 1963; Dye 1966; Carmines 1974; Dunlap and Allen 1975; Foster 1978; Lester 1980; Lowe and Pinhey 1982; Boeckelman 1991; Berry and Berry 1992). Industrialization often affects economic development; urbanization often accompanies industrialization (Reams 1990, 16). Many have hypothesized that the states which are home to large manufacturing businesses should be less inclined

to pass environmental regulation, or simply put, more "pro-business." Ringquist (1994), for example, found that in states with powerful mining interests, legislatures less frequently passed water quality regulations.

However, other scholars have challenged the notion that industry categorically opposes environmental regulation (Stigler 1971; Meier 1985). In the case of hazardous waste regulation, Williams and Matheny (1984, 433) found that firms were willing to support regulation provided the costs of compliance were passed on to consumers. Regens and Reams (1988, 65) found that more industrialization was a significant predictor of state efforts towards water-quality management. This was confirmed by the findings of Hays' et al. (1996). Similarly, Lowry (1992) found that states with large numbers of manufacturing and utility industries are more likely to pass air and water regulations.

If one considers the constituencies in urban areas, this is not surprising. That is, one possible explanation for environmental regulation in urban areas is that urban dwellers generally view environmental legislation more favorably (Kenski and Kenski 1981), and are generally more politically liberal (Key 1967, 111-12). Numerous surveys reveal the urban residence/environmental regulation nexus (Erskine 1972b; Louis Harris and Associates 1970a, 1970b; Morton and Brady 1970). Voter preferences may be reflected in the voting choices of legislators (Calvert 1989). This was found to be the case in Oregon politics (Dunlap and Gale 1974). States with large urban populations tend to pass more environmental regulations (Crotty 1987). Densely populated states are more aggressive at recycling programs (Khator 1993). In non-environmental studies, urbanization has

been found to be a predictor of policy. Hwang and Gray (1991) found, for example, that states that were less urbanized tend to spend more money on highway development and education. Yet urbanization was not a significant predictor of expenditure on welfare programs (Hwang and Gray 1991).

Early research by Duerksen (1983), and Davis and Lester (1989), indicated that some rural states were ranked the best in terms of environmental commitment (Montana), while other rural states were also ranked the worst (Idaho and New Mexico). In a more recent study by Hall and Kerr (1991), the state most committed to environmental protection was Colorado, an urban state, while the least committed was Wyoming, a rural state. In contrast to urban states, in rural states one might expect less environmentally-minded citizenry (Buttel and Flinn 1978; Trembley and Dunlap 1978). Dunlap (1973) found that urbanites were, in fact, more inclined to support environmental initiatives than their rural counterparts. Thus, farmers may look less favorably toward environmental regulation (Dillman and Christensen 1975; Calvert 1979). This may affect legislative voting patterns (Calvert 1989). However, this was not reflected in Dunlap and Gale's (1974) study of Oregon legislators; there, occupation had little effect on environmental voting patterns. It appears that two variables are at odds: industrialization may generally be believed to create an anti-environmental climate. Yet, industrialization often coincides with urbanization, with its attendant population sensitive to environmental issues. More studies may be needed to clarify the role of industrialization and urbanization.

Other than affluence, industrialization, and urbanization, other socioeconomic variables have been used. These include race (Strickland and Whicker 1992; Nice

1994; Brown 1995; Hero and Tolbert 1996; Gray 2001) or ethnicity (Brooks 1999), sex (Brooks 1999; Mockabee, Monson and Grant 1999), population size (Dye and Davidson 1981; Regens 1980a; Savage 1985; Bacot and Dawes 1996), age (Tognacci 1972; Nice 1994; Mooney 2001), education (Dunlap and Gale 1974; Allen and Clark 1981; Nice 1994), religion[63] (Blair and Savage 1981; Morgan and Watson 1991; Nice 1994), unemployment (Dunlap 1973) and occupation (Brooks 1999), marital status (Mockabee, Monson and Grant 1999), judicial leadership (Canon and Baum 1981; Glick 1981; Savage 1985), and other contextual variables peculiar to the research topic.

Contextual variables have included, for instance, climate (Regens 1980a), camping concern (Mazmanian and Sabatier 1980), pollution (Lowry 1996; Bacot and Dawes 1996), federal support to states (Lowry 1992), or adoption of Conrail policies (Nice 1994). Contextual variables have also included technological/environmental influences (Maggiotto and Bowman 1982; Lester 1983; Regens and Reams 1988; Reams 1990; Blomquist 1991; Ringquist 1993). Technological/environmental influences have been operalizationalized as threats to the natural environment (Davies 1970; Jones 1976; Reams 1990; Blomquist 1991; Bacot and Dawes 1996), the level of reliance on a particular resource (Regens 1980a), the level of energy consumption (Recchia 1999; Scraggs 1999), or the level of environmental degradation (Mann 1982; Lester 1994).

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[63]Religion may be used to measure political culture. J.D. Hutcheson, and G. Taylor, "Religious Variables, Political System Characteristics and Policy Outputs in the United States," *American Journal of Political Science* 17 (1973): 414-15; David Fairbanks, "Religious Forces and Morality Politics in the American States," *Western Political Quarterly* 30 (1977): 411-17.

As noted by Boyne (1986), it is important to chose variables that have relevance to one's research question. Many researchers appear to haphazardly test variables, not considering the theory or context of their research questions. For that reason, this study tests the influence the following variables had on the passage of agricultural product disparagement legislation: partisanship; ideology; environmental resource commitment; farming interest; pesticide manufacturer interest; free-speech interest, and; environmental group interest. The reason these variables were chosen as well as their corresponding hypotheses are discussed more fully in Chapter Three.

This literature review has focused on the empirical studies of comparative state policy adoption. However, the empirical research would not have been possible without underlying political, social, or economic theories, and qualitative research. In the case of studies testing interest group influence, pluralism has been the foundation for subsequent empirical work. Beginning with the theory of "factions," James Madison introduced the idea that policy is created by the push and pull of different groups in society (Federalist 10). Subsequently, scholars have worked to refine and critique pluralism. According to Dahl, minorities rule, not the majority (Dahl 1961). Latham (1952) adds:

> The legislature referees the group struggle, ratifies the victories of the successful coalitions, and records the terms of the surrenders, compromises, and conquests in the form of statutes. Every statute tends to represent compromise because the process of accommodating conflicts of group interest is one of deliberation and consent. The legislative vote on any issue tends to represent the composition of strength, i.e., the balance of power, among contending groups at the time of

> voting. What may be called public policy is the equilibrium reached in this struggle at any given moment, and it represents a balance which the contending factions of groups constantly strive to weigh in their favor.

Later, Lowi (1964), Wilson (1973), and Hayes (1981) made significant strides in the theory of interest groups. Of particular significance is their understanding of the discrete roles interest groups play. As recognized by Hayes (1981, 3) interest "groups might well be pivotal to certain kinds of issues and largely peripheral to others." In one prominent study, Schlozman and Tierney (1986) concluded that interest groups are most effective when pursuing narrow economic interests, and that their influence is strongest at blocking, rather than obtaining, legislation.

Mayhew (1974) added to the theory of the policy process by working from the basic assumption that legislators will vote in such a way as to maximize their chances of reelection. Frequently this means that they are not responsive to interest groups, in contrast to the more traditional interest group theory. Mayhew's theory has been challenged as too simplistic. Fenno (1973) identified at least three factors, in addition to the desire to be reelected, that influence legislator's voting patterns: gaining influence within the legislature, making good public policy, and setting up a career after public office. Party loyalty may also motivate some legislators' voting patterns (MacRae 1956). Other theorists have argued that psychological traits are good predictors of a legislator's vote (Riesman et al. 1956; Bell 1971).

Public choice theorists have also provided some unique insight into interest group politics and the process of public policy development. Perhaps most well-

known is Olson (1965) who questioned the basic premise that large interest groups can form and effectively influence public policy. Given the limited benefits a large organization can provide its members, a central theme of Olson's theory is that small interest groups are the most effective and that they act for their own benefit, often to the detriment of the larger public interest. All public choice theory rests on a fundamental assumption: legislators act out of self-interest, particularly the desire to be reelected. Thus, public choice scholars have rejected the premise of traditional literature that ideology plays a role in the policy process. Some studies have reported empirical findings consistent with the public choice literature. Blais et al. (1989), for instance, found that small diffuse labor groups were more effective than large labor unions.

In contrast, large environmental interest groups, such as the Sierra Club, Natural Resource Defense Council, and Greenpeace, are well known for their lobbying efforts. Rosenbaum (1998, 311), for example, credits the Sierra Club, among others, for being instrumental in the passage of the National Environmental Policy Act. If political power rests in numbers, the ability of environmental interest groups to wield political influence can not be denied, as indicated in Table 1 below.

TABLE ONE:

ENVIRONMENTAL INTEREST GROUP MEMBERSHIP IN THE UNITED STATES

Interest Group	1989	1992	1997
Audubon Society	516,000	600,000	600,000
Environmental Defense Fund	125,000	200,000	300,000
National Wildlife Federation	5,800,000	6,200,000	4,400,000
Natural Resources Defense Council	170,000	NA	170,000
Sierra Club	553,000	575,000	550,000
Wilderness Society	330,000	310,000	270,000
Total	*7,424,000*	*7,935,000*	*6,525,000*

Source: Robert Cameron Mitchell, "From Conservation to Environmental Movement: The Development of Modern Environmental Lobbies," in Michael J. Lacey, ed., *Government and Environmental Politics: Essays on Historical Development Since World War II*.

In short, the theoretical literature that supports empirical work of the type presented here is rich, but does not fully explain or allow for predictions about the circumstances that lead to policy changes. While various interest groups in the United States may be strong, such as environmental activists, we cannot be certain that they wield the influence the theoretical literature suggests without quantitative studies.

Summary

Extant studies suggest that many questions remain open in state environmental policy research. In their quest to explain and predict policy output, scholars are examining a wide array of factors. As background information for the study, Chapter Two includes a review of agricultural food disparagement statutes and the related case law. Chapter Three reviews the variables and hypotheses. Chapter Four presents the results of the statistical analysis. Chapter Five contains the conclusions.

Chapter 2

AGRICULTURAL PRODUCT DISPARAGEMENT LEGISLATION and LAW

Agricultural Product Disparagement Bill Enactment

Thirty-three state legislatures have considered agricultural product disparagement legislation. In thirteen of those states, a bill has been passed. Legislatures were able to pass the bills despite the lack of data supporting the commonly-held belief that food scares have adversely affected the agricultural industry. The first state to consider agricultural product legislation was Colorado. There, the house and senate passed the bill, but the governor vetoed it. Citing his concerns for freedom of speech, then-Governor Roy Romer, refused to sign the Colorado bill into law. Subsequently, Colorado passed a criminal version of agricultural product disparagement legislation. In the other twelve states in which a bill passed in both houses, governors signed them into law. There has also been a failed attempt to include an agricultural product disparagement in a federal law.[1] Efforts to repeal Texas' statute have also failed.[2]

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[1]Ronald K.L. Collins, and Paul McMaster, "'Veggie Libel' Laws Still Pose a Threat," *New Jersey Law Journal*, 6 April 1998: 24.

[2]Ron Rugless, "It's Not Easy Being Green-Or Red-In New Mexico," *Nation's Restaurant News*, 28 June 1999: 246..

Louisiana was the first state to actually pass an agricultural product disparagement bill into law. Thereafter, twelve states followed suit. In chronological order of passage these states are Idaho, Alabama, Georgia, Mississippi, South Dakota, Arizona, Colorado, Florida, Oklahoma, Texas, Ohio, and North Dakota, as shown in Table 2. In general, the statutes are quite similar: They establish civil liability for publication of non-scientific information about the health risks associated with farm produce. Only the Idaho statute stands apart as anomalous in many significant provisions. The differences and similarities in the statutes are explored below. A critique and analysis of the statutes is also provided. A review of the case law relevant to agricultural product disparagement regulation is also included.

TABLE 2:

ENACTMENT OF STATUTES BY DATE

1991	LOUISIANA
1992	IDAHO
1993	ALABAMA
1993	GEORGIA
1994	MISSISSIPPI
1994	SOUTH DAKOTA
1995	ARIZONA
1995	COLORADO
1995	FLORIDA
1995	OKLAHOMA
1995	TEXAS
1996	OHIO
1997	NORTH DAKOTA

Compiled from: Statutes of respective states.

Agricultural Product Disparagement Statutes

The statutes are quite similar in content. Louisiana's agricultural product disparagement statute is typical. The statute begins at § 4501, and only contains four provisions, as follows:

> §4501. Legislative Findings
> The legislature hereby find, determines, and declares that the production of agricultural and aquacultural food products constitutes an important and significant portion of the state economy and that it is beneficial to the citizens of this state to protect the vitality of the agricultural and aquacultural economy by providing a cause of action for producers of perishable agricultural food products to recover damages for the disparagement of any perishable agricultural or aquacultural food product.
>
> § 4502. Definitions
> As used in this Chapter, the following terms shall have the following meanings:
> (1) "Disparagement" means dissemination to the public in any manner of any false information that the disseminator knows or should have known to be false, and which states or implies that a perishable agricultural or aquacultural food product is not safe for consumption by the consuming public. Such information is presumed to be false when not based upon reasonable and reliable scientific inquiry, facts, or data.
> (2) "Perishable agricultural or aquacultural food product" means any food product of agriculture or aquaculture which is sold or distributed in a form that will perish or decay beyond marketability within a period of time.
>
> § 4503. Cause of action; recovery of damages
> Any producer of perishable agricultural or aquacultural food products who suffers damage as a result of another person's disparagement of any such perishable agricultural or aquacultural food product has a cause of action for damages, and for any other appropriate relief in a court of competent jurisdiction.

> § 4504. Limitation of action
> Any civil action for damages for disparagement of perishable agricultural or aquacultural food products shall be commenced within one year after the cause of action accrues.

To further understand these statutes, one may begin with the legislative intent. The laws are purportedly protectionist legislation for agricultural businesses. The legislative intent for each statute is shown in Table 3. The legislative justification in half of the states that have passed an agricultural product disparagement bill is that farming is significant to the state's economy, and that it is in the citizens' best interest to protect it. In two state statutes, Idaho's and Oklahoma's, agriculture is purportedly a large portion of the state's economy, thereby providing a rationale for the legislation.

The remaining four states, Arizona, North Dakota, South Dakota, and Texas, do not provide a legislative purpose in the codified law. In short, in most statutes, the stated rationale is protection of a significant revenue-producing sector of the economy; in a minority of states, no justification is given. It is interesting to note that the legislative intent that was codified by states is distinct from that proposed in the model act (Appendix 1). In the model act, the purpose is the "free flow" of farm produce and to enhance "public welfare."

TABLE 3:

LEGISLATIVE INTENT

State	Legislative Intent
Alabama	agriculture significant to state economy and needs to be protected
Arizona	not stated
Florida	agriculture significant to state economy and needs to be protected
Georgia	agriculture significant to state economy and needs to be protected
Idaho	agriculture large portion of economy and needs to be protected
Louisiana	agriculture significant to state economy and needs to be protected
Mississippi	agriculture significant to state economy and needs to be protected
North Dakota	not stated
Ohio	agriculture significant to state economy, false statement detrimental to all, and needs to be protected
Oklahoma	agriculture large portion of economy and needs to be protected
South Dakota	not stated
Texas	not stated

Compiled from: Statutes of respective states.

In addition to statements of legislative intent, the statutes contain other provisions. Most of the agricultural product disparagement statutes delineate who is eligible to sue, known in legal terminology as standing; the object which is the subject of the publication or defamation, usually farm produce; a definition of what constitutes a "false" statement; the type or level of intent the publisher must possess; the type of damages that are available, and; the time period in which plaintiff must bring the cause of action, or statute of limitations. A state-by-state summary of the statutory provisions is contained in Table 4.

The persons who may sue are frequently limited to a discrete group, as shown in Figure 2. Seven states have limited standing to "producers," or "manufacturers." Those states are: Idaho, Louisiana, Mississippi, North Dakota, Oklahoma, South Dakota, and Texas. However, these statutes do not define "producer." Thus, whether "producer" includes other persons than farmers will be left for judicial determination. The model act is similar inasmuch as "producers" are given standing to sue. However, the model act does define producers fairly broad. Those who actually produce or manufacture a product for human consumption, i.e., processors, are included as potential plaintiffs. Arguably, then, under the model act, a person who is not a farmer, but one who makes another food product from raw farm produce, has standing. However, distributors beyond the farmers and manufacturers do not appear to have standing under the model act. This suggests that a strawberry farmer and a strawberry jam producer could sue, but a grocery store owner could not. Again, however, this is an interpretation of the model act. How the actual laws of the aforementioned seven states will be interpreted by courts

FIGURE 2:

POTENTIAL SCOPE OF STANDING RULES

is not known. The standing requirements of other agricultural product disparagement laws differ from the aforementioned seven states and the model act.

Some state laws have broader definitions of standing than the model act. Under a few statutes, not only producers, but associations of producers, may sue for damages resulting from disparaging statements about farm products. Thus, Arizona, Florida, North Dakota, and Ohio allow not only producers, but associations of producers, to sue. Florida, for example, defines a producer as one "who actually grows or produces perishable agricultural food products;"[3] and an association is an entity that represents producers who have suffered from a disparaging statement.[4] This is legally significant since an association would often have the resources to litigate a case that an individual farmer would not. For example, a state association of sweet potato farmers may have counsel on retainer and a financial fund to pay litigation costs.

The remaining five statutes allow an even broader group to sue. Alabama and Georgia extend standing to sellers and marketers or distributors in addition to producers.[5] In these states it appears that almost the complete chain of produce handlers have the right to sue. That is, standing extends to the farmer who plants the seed, to the wholesaler who buys from the farmer, to the manufacturer who uses the product to make another food commodity, and to the retailers who sell the raw or processed product. Two other states, Arizona, and Georgia have the

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[3]Fl St. § 865.065(2)(c).

[4]Fl St. § 865.065(3).

[5]Al St. § 6-5-622; OH St. § 2307.81(B)(4).

broadest definitions of plaintiffs. Arizona not only allows marketers, producers and sellers to sue, but extends standing to shippers and transporters.[6]

Perhaps even broader standing rules apply in Georgia. Georgia provides standing not only to manufacturers but to consumers as well. This seems to be a curious anomaly. Why would the typical consumer want to sue under an agricultural product disparagement statute? Typical consumers would presumably want all the information they could, even if subsequently it proved erroneous or wrong. This would seem to be the natural tendency of the average consumer, i.e., that they would exercise the precautionary principle on a micro-level. But legally the significance of providing standing to "consumers" appears to literally allow any "person"[7] to sue; thus, making Georgia the most plaintiff-friendly state. Ironically, this also makes Georgia, in effect, the state that is most business protective and anti-consumer.

The legal principle of standing should not be taken lightly. As this summary suggests, effectively, the definition of standing gives some the "password" to enter the "club" of the courthouse. Obviously, the broader group of plaintiffs who are able to sue, the more powerful an agricultural product disparagement statute will be in stifling speech about food safety and pesticides. Again, the continuum runs from the more narrow definition allowing only "producers" to sue which may be judicially limited to farmers per se, to the broadest, including "consumers," presumably

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[6]AZ St. § 3-113E3&4.

[7]Under common law in United States, that generally means that corporations or other business entities could sue as a "consumer."

allowing anyone to sue. One should also be mindful, also, that in describing some of the standing rules as "more narrow" that is used in comparison to other state agricultural product disparagement statutes. It does not suggest, however, that a "more narrow definition" of standing means that a very limited group can sue, or that the possibility of a lawsuit is highly unlikely because of the standing rules. Indeed, under any of the statutes, at a minimum every "injured" farmer in a state has standing. In the era of mass media and internet communications, anyone within the United States that publishes something negative about farm products is a potential target for an agricultural product disparagement-based lawsuit. There is also nothing to preclude a farming association or any other entity from financing litigation, even if it were precluded from being a named plaintiff.

Another significant provision in the agricultural product disparagement laws describes the event or events that gives rise to a cause of action. That is, what factually must occur in order for someone to have a basis to sue. These provisions differ slightly from state-to-state. Generally, the event is an untrue, negative statement about an agricultural product. But there are some differences and nuances from state to state. First, in some statutes the object of derision may be limited only to agricultural products. However, some states allow damages for defaming aquaculture products as well. In fact, in a majority of states, aquacultural products are included. Thus, Alabama, Arizona, Florida, Georgia, Louisiana, Mississippi, Ohio, South Dakota, and Texas, provide a cause of action not only for disparaging land-based farm produce, but also for fish and seafood. The model bill appears to encompass aquaculture as well, as its definition of an agricultural

product extends to animals raised for commercial sale. Arguably, fish and seafood are included within the term "animals." For example, one might assume that that would include farm-raised catfish or tilapia, significant industries in Mississippi and Louisiana, for example.

However, Idaho, North Dakota, and Oklahoma limit the product to agriculture. It is not surprising that North Dakota and Oklahoma do not include aquaculture, since it is not a significant industry in those states. Why Idaho did not include aquaculture is curious, since Idaho is the largest producer of commercial trout in the country. Not only has Idaho declined to include aquaculture, but it has even more narrowly defined the object of derision in comparison to other states. In Idaho, the object of derision must be plaintiff's specific product, not a "generic group of products."[8] This appears to be quite significant legally. If, for example, former President Bush again remarks that he does not like broccoli, that may be actionable in an agricultural product disparagement state. In Idaho, however, the statutory language suggests that President Bush would have to say he does not like farmer Smith's broccoli. Since most food scares about food produce, particularly those concerning fruits and vegetables as opposed to livestock, involve generic complaints, Idaho's law makes it much more difficult for plaintiffs to succeed.

In contrast, the laws in other states are opening the doors wide open to claims. Some states extend coverage to include farming "practices" as well as "products." Thus, in North Dakota, and South Dakota one should refrain from

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[8]ID St. 6-2002(1)(a) and 6-2003(4).

speaking ill of "farming practices." How this might be interpreted by a court is unknown. Arguably, however, "farming practices" could include such activities as aerial spraying of pesticides, the enclosure, feeding and treatment of livestock, or the rotation (or not) of crops, just to name a few examples. North Dakota broadened coverage even further by making not only statements about products and practices, but statements about "producers" actionable as well.[9] So the statement that farmer Jones feeds his chickens dyed cornmeal which is a human carcinogen may be actionable for several reasons in North Dakota. One arguably is defaming the farmer: he is engaged in a practice that purportedly caused a health risk to the consuming public. This, therefore, is defaming a farming practice. Moreover, the farm produce itself, chickens, is allegedly harmful. It should be noted, however, that what exactly is meant by "practices" is not known. The statutes make no attempt to define the term. Again, this is a matter for judicial determination.

At the heart of these laws is the statement or statements that are the basis for lawsuits. What must be said in order for a plaintiff to have a cause of action? With two exceptions, the types of statements that support a cause of action are remarkably similar: making a "false," public statement about a perishable food product is actionable in ten states: Alabama, Arizona, Florida, Georgia, Louisiana, Mississippi, Ohio, Oklahoma, South Dakota, and Texas. In the two other states, Idaho and South Dakota, the type of statements are more restricted. In Idaho the

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[9]ND St. § 32-44-02.

legislature emphasized that the statement must be about plaintiff's specific product.[10] North Dakota added the proviso that the statement must be made under circumstances in which it is likely to be believed.[11] The model act provides that statements must not only be false, but defamatory as well.

What exactly the drafters had in mind is not clear from the model act, but it is interesting that the states have declined to follow the same language. In the statutes that have been passed, statements must be "false" and about human food safety in order to support a cause of action. Falsity is defined with amazing similarity. In ten of the states the language is almost identical. In Louisiana the legislature defined falsity as that which is "not based upon reasonable and reliable scientific inquiry, facts, or data."[12] This language is mimicked almost word-for-word in the laws of Alabama, Arizona, Florida, Georgia, Mississippi, North Dakota, Ohio, Oklahoma, and Texas. However, Idaho's legislature and South Dakota's statutes do not include a definition of falsity. Once again, the model bill is quite different. Under the model bill, false statements are those that are "not correct," a relatively more amorphous standard than that actually enacted by the states.

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[10]ID St. § 6-200291)(a) & § 6-2003(4).

[11]ND St. 32-44-02.

[12]La R.S. § 4502(1).

TABLE 4:

COMPARISON OF STATE CIVIL STATUTORY PROVISIONS

State	Standing	Object	Definition of Falsity
ALABAMA	marketer, producer, seller	agricultural and aquacultural product	not based upon reasonable and reliable scientific inquiry, facts, or data
ARIZONA	marketer, producer, seller, shipper, or association thereof	agricultural and aquacultural product	not based on reliable scientific facts and reliable scientific data
FLORIDA	producer or association thereof	agricultural and aquacultural product	not based on reliable, scientific facts and reliable scientific data
GEORGIA	marketer, processor, producer, seller, or consumer	agricultural and aquacultural product	not based upon reasonable and reliable scientific inquiry, facts, or data
IDAHO	producer	agricultural products for humans	not stated
LOUISIANA	producer	agricultural and aquacultural product	not based upon reasonable and reliable scientific inquiry, facts, or data
MISSISSIPPI	producer	agricultural and aquacultural product	not based upon reasonable and reliable scientific inquiry, facts, or data
NORTH DAKOTA	distributor, manufacturer, producer, or seller, or association thereof	commercial agricultural or agricultural practice; agricultural producers	not based upon reasonable and reliable scientific inquiry, data, or facts
OHIO	distributor, producer, seller, or association thereof	agricultural and aquacultural product	not based upon reasonable and reliable scientific inquiry, facts, or data

OKLAHOMA	producer	agricultural products	not based on reliable scientific facts and scientific data
SOUTH DAKOTA	producer	agricultural & aquacultural products & practices	not stated
TEXAS	producer	agricultural and aquacultural product	not reasonable and reliable scientific inquiry, facts, or data

Compiled from: Statutes of respective states.

Another provision one would expect to see in a new statute is the burden of proof. That is, which party to a lawsuit must produce evidence in order to prove their claim. As a general legal principle, American law greatly favors plaintiffs being held responsible to prove their case. In other words, even in civil cases the notion of "innocent until proven guilty" generally applies; that is, the plaintiff usually bears the burden of proof. However, agricultural product disparagement statutes depart from this legal tradition. Most of the statutes do not state which party bears the burden of proof, as shown in Table 5. Only Idaho and Ohio make explicit statements about the burden of proof. In Idaho, the plaintiff must prove each element of the cause of action under a heightened level of proof, clear and convincing evidence.[13] The only other state statute to contain a provision for the burden of proof is Ohio, but only for the purpose of recovering punitive damages. Under that statute, in order to recover punitive damages, attorney fees, or costs, a plaintiff must prove that the defendant knew or should have known the statement was false.[14]

Yet another provision in the statutes is the intent of the person making the allegedly defamatory statement. Whether the defendant must make the disparaging statement with the intent to harm the plaintiff, or knowing that it was false, varies from statute-to-statute. Alabama's law has no explicit standard; in other words, the standard is one of negligence. In many states, the defendant must

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[13]ID St. § 6-2003(2).

[14]OH St. § 2307.81(C).

have known, or should have known, that the statement was false. Those states are: Arizona,[15] Florida,[16] Louisiana,[17] Mississippi,[18] North Dakota,[19] Ohio,[20] Oklahoma,[21] South Dakota,[22] and Texas.[23] A few statutes require a showing of malice; those states are Arizona,[24] Florida,[25] Georgia,[26] and Idaho.[27] As discussed further under *Analysis of Statutory Law*, the state of mind or intent of the defendant is not a mere legal nicety. If, for example, one could be held responsible for a casual or flippant remark made with little thought as possible in Alabama, and arguably in other states, then the scope of statements leading to damages greatly widens. In contrast, the stricter or more difficult type of intent, restricts the types of events that should lead to litigation, as shown in Figure 3.

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[15]AZ St. § 3-113E.1.

[16]FL St. § 865.065(2)(a).

[17]LS R.S. 3:4502(1).

[18]MS St. § 69-1-253(a).

[19]ND St. 32-44-01.6 and 32-44-02.

[20]OH St. § 2307.81(C).

[21]OK St. § 3012.

[22]SD St. § 20-10A-1(2).

[23]TX Civ. Prac. & Rem. § 96.002(a)(2).

[24]AZ St. § 3-113.

[25]FL St. § 865.065(2)(a).

[26]GA ST 2-16-2(1).

[27]ID ST § 6-2002(d).

FIGURE 3:

INTENT/SCOPE OF POSSIBLE LAWSUITS

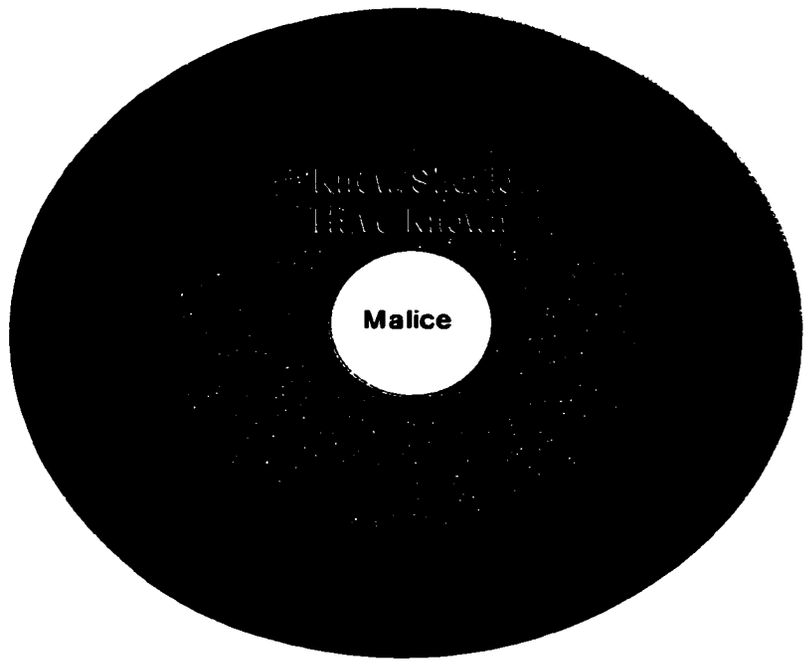

TABLE 5:

STATUTORY BURDEN OF PROOF, INTENT, DAMAGES, AND STATUTE OF LIMITATIONS

State	Burden of Proof	Intent	Damages	Statute of Limitations
ALABAMA	not stated	none (negligence standard)	compensatory & punitive	one year
ARIZONA	not stated	malicious publication and intentionally to harm plaintiff and knew/should have known false statement	compensatory & punitive	two years
FLORIDA	not stated	willful or malicious publication and knew/should have known false statement	compensatory (treble for intent to harm plaintiff)	two years
GEORGIA	not stated	willful or malicious publication	compensatory & punitive	two years
IDAHO	plaintiff on all elements by clear and convincing evidence	intended or reasonably should have recognized likely to harm plaintiff and malicious or reckless disregard for falsity of statement	compensatory (punitive specifically disallowed)	two years
LOUISIANA	not stated	knew/should have known false statement	compensatory	one year
MISSISSIPPI	not stated	knew false statement	compensatory	one year

NORTH DAKOTA	not stated	willfully or purposefully publishes statement under circumstances likely to be believed and knew false statement or reckless disregard for truth	compensatory & punitive (treble, costs & fees for malicious publication)	two years
OHIO	plaintiff that defendant knew/should have known of falsity	knew/should have known false statement	compensatory, punitive, fees and costs (treble for intent to harm plaintiff)	two years
OKLAHOMA	not stated	knew/should have known false statement	compensatory	not stated
SOUTH DAKOTA	not stated	knew false statement (intent to harm necessary for treble damages)	compensatory (treble for intent to harm plaintiff)	one year
TEXAS	not stated	knew false statement	compensatory	not stated

Compiled from: Statutes of respective states.

The statutes also provide provisions for damages. The potential recovery from agricultural product disparagement litigation is very generous in most statutes. All states allow actual or compensatory damages. This might mean, to illustrate, that if farmer Brown can not sell his milk for two months because a neighbor said it was rancid, Brown would be entitled to the loss profits from two months of sales. Many statutes, however, provide for damages beyond those for actual loss, or treble damages. In fact, seven statutes provide for exemplary or punitive damages, i.e., damages that are over and above those awarded for actual loss. Punitive damages are designed to punish the defendant and discourage others from engaging in similar conduct. Alabama, Arizona, Florida, Georgia, North Dakota, and Ohio have codified the right to punitive damages. In contrast, the law in Idaho explicitly excludes the possibility of punitive damages.[28]

Some statutes also include the possibility of treble damages (tripling the compensatory award), or awards for attorneys fees and costs. Treble damages are a possibility in North Dakota,[29] Ohio,[30] and South Dakota.[31] North Dakota[32] and Ohio[33] also allow for the award of attorney's fees and costs. As discussed in more detail under *Analysis of Statutory Law,* the damage provisions of agricultural product

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[28]ID St. § 6-2003(3).

[29]ND St. 32-44-02.

[30]OH St. § 2307.81(E).

[31]SD St. § 20-10A-3.

[32]ND St. 32-44-02.

[33]OH St. § 2307.81(C).

disparagement laws are yet another basis for contentions over their enactment. Punitive damages may strike more fear in potential defendants than any other aspects of the laws. One could imagine a "runaway" jury awarding exorbitant damages to one of their local farmers.

Analysis of Statutory Law

Agricultural product disparagement laws will face Constitutional challenges. Overwhelmingly, legal scholars believe these laws violate the First Amendment and the Fourteenth Amendment of the U.S. Constitution.[34] The First Amendment prohibits the abridgement of free speech, "of the press, or the right of the people to peacefully to assemble, and to petition the Government for a redress of grievances." The Fourteenth Amendment, in pertinent part, provides that states may not deprive citizens of "due process of law; nor deny any person within its jurisdiction the equal protection of the laws." Agricultural product disparagement laws may also violate state constitutional law. For example, Iowa's Constitution provides: "Every person

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[34]Professor Rodney Smolla, a professor at William and Mary Law School, has been quoted as saying that food disparagement laws "'dilute First Amendment standards and/or [sic] undermine the spirit of the principles underlying them. Some blur the line between expressions of opinion and false statements of fact. Others permit liability to be predicated on mere negligence, as opposed to knowing and reckless falsity. Still others appear to shift the burden of proof from the public figure plaintiff to the speaker.'" Ronald R. K. Collins, "Veggie Libel," *Multinational Monitor*; available from http://www.infoasis.com/www/people/steveat/Environment/Veggie_Libel.html. Other scholarly critiques of food product disparagement legislation include David J. Bederman, Scott M. Christenson, and Dean Quesenberry, "Of Banana Bills and Veggie Hate Crimes: The Constitutionality of Agricultural Disparagement Statutes," *Harvard Journal on Legislation* 34 (1997): 135-58; Julie J. Scrochi, "Must Peaches be Preserved at All Costs?" *Georgia State University Law Review* 16 (1996): 1223-52; Semple, "Veggie Libel Meets Free Speech"; Eric M. Stahl, "Can Generic Products be Disparaged? The 'Of and Concerning' Requirement After Alar and the New Crop of Agricultural Disparagement Statutes," *Washington Law Review* 71 (1996): 517-41; Bruce E.H. Lowry,, and Susanna M. Lowry, "Litigating Falsity in a Non- 'Of and Concerning' World," *Communications Lawyer* 12 (1994): 1-22.

may speak, write, and publish his sentiments on all subjects, being responsible for the abuse of that right. No law shall be passed to restrain or abridge the liberty of speech, or of the press" (Iowa Const. art. I, § 7). Obviously, each state Constitution is different, but it is not uncommon for a state Constitution to give heightened free-speech rights to its citizens.

Public interest groups and scholars alike have denounced agricultural product disparagement statutes for their alleged chilling effect on discourse about food safety.[35] In articulating that concern as a legal argument, scholars construct arguments based on Constitutional case law. Since an agricultural product disparagement case has not reached the U.S. Supreme Court, legal scholars base their arguments on cases involving similar causes of action. Specifically, they rely on the common law actions of libel, defamation, or product disparagement. Under principles and rules established in that body of jurisprudence, scholars believe that agricultural product disparagement statutes will not pass Constitutional muster, and thus ultimately will go the way of anti-miscegenation laws or similar ilk which Americans now few as an anachronism.

In order to understand why scholarly opinion is so one-sided on this issue, one must first consider the common law torts that have been shaped by

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[35]The Food Speak Coalition is a public interest group formed for the sole purpose of lobbying for the repeal of food disparagement statutes, since it believes that the laws violate first amendment, free speech right. Corey C. Bradley, "Anticipated Challenge to Veggie Libel From Cracks as Ohio Egg Company Drops Suit," July 8, 1998; available from http://www.freedomforum.org/speech/1998/7/8eggs.asp. People for the American Way also oppose food disparagement laws: "It's quite clear that these laws violate the First Amendment and stifle free speech in this country," said legal director Elliot Mincberg. "Cattlemen's Case Hinges on Free-Speech Issue," *Omaha World-Herald*, 21 January 1998, 5.

Constitutional jurisprudence. The torts of defamation, libel, and product disparagement have all been tested to see if they are consonant with the U.S. Constitution. In the course of reviewing cases involving these torts, the Supreme Court has articulated a number of rules and principles of First Amendment or free speech law. These same principles are believed applicable to agricultural product disparagement laws. The tort known as common-law product disparagement is conceivably the closest "kin" to a statutorily-based cause of action for agricultural product disparagement.

In cases of common-law product disparagement, a court generally considers whether the plaintiff has proved that: "(1) the defendant published a false statement which disparaged plaintiff's product...(2) the defendant acted with 'malice' and (3) the plaintiff sustained 'special damages' due to the disparagement." In a series of opinions, state and federal courts have more precisely interpreted these elements.

Under product disparagement, plaintiff bears the burden of proving that the statement is false.[36] Similarly, in defamation cases, the Supreme Court has ruled that plaintiff does indeed carry this burden.[37] The agricultural product disparagement statutes, however, usually shift the burden from the plaintiff to the defendant. In the face of plaintiff's allegation that his strawberries, for example, have been defamed, it would be incumbent upon defendant to produce evidence showing that the strawberries were in fact unhealthful according to reasonable and

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[36]See Systems Operations, Inc. v. Scientific Games Development Corp., 555 F.2d 1131, 1141-42 (3d Cir. 1977).

[37]Philadelphia Newspapers, Inc. v. Hepps, 475 U.S. 767, 775-76 (1986).

reliable scientific evidence. All but the Idaho and Ohio statutes shift the burden of proof to the defendant. This aspect of the statutes has been widely criticized. Shifting the burden of proof functions as the civil law equivalent of the criminal law prohibition against guilty before proven innocent. It is a legal axiom under American jurisprudence that the party that brings a legal action must establish each element of the claim with credible evidence.

In terms of burden of proof, the statutes can be classified into different groups. Two statutes, Idaho's and Ohio's, follow the traditional mode, by explicitly placing the burden of proving a prima facie case on plaintiff. To the other extreme are the statutes that contain language to the effect that falsity is presumed under certain conditions. For example, Louisiana's act provides that a statement is "presumed to be false when not based upon reasonable and reliable scientific inquiry, facts, or data." Similarly, Georgia's law contains the proviso that "information shall be deemed...false."

Most states chose to incorporate some form of a reasonable or reliable measure. Arizona's law is typical: Statements "not based on reliable scientific facts and reliable scientific data" are false. This is what might be called the "whatcha got" of agricultural product disparagement litigation. Defendant is required to proffer evidence in the form of scientific studies or research, reasonable or reliable ones at that, whatever that means. The expense and inherent difficulties of this could take up volumes (Johnson 198; Altshuler 1998; Mumford and Johnson 1998). Again, if common law product disparagement is the model, the burden of proving

falsity should rest with the plaintiff.[38] If defamation law is the model, then again, plaintiff bears the burden of proving falsity.[39]

In an age of scientific uncertainty, conclusive proof of anything scientific is illusive. Somewhere, there are probably still scientists who maintain that cigarettes do not cause cancer. For an environmental interest group, this effectively puts a high price on their public announcements about food safety concerns. In a worse-case scenario, the environmental interest group has well-credentialed, well-respected scientists perform research and then conclude that "X" chemical applied to fruits and vegetables is hazardous to human health. If a farmer or other interested party, like a chemical manufacturing company, can find a scientist to reach a different conclusion, the environmental interest group is subject to litigation.

Disputes between well-credentialed, well-meaning scientists are legendary. Indeed, without these disputes or challenges, science would not move forward and we would still be teaching school children that the world is flat. Gulf War Syndrome, breast implants, genetically-modified corn, breast implants, or even something seemingly innocuous as coffee and peanut butter, have been subject to public debate and scientific analysis about the risks each poses to human health. Even Alar, for example, remains theoretically controversial. The point is that because of the fear that the statutes could be interpreted and enforced to require scientific certainty if one wants to publicly address the health risks associated with some

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[38]Systems Operations, Inc. v. Scientific Games Development Corp., 555 F.2d 131, 1141-42 (3d Cir. 1977). It should be noted, however, that not all courts require a showing of malice in a product disparagement claim.

[39]Philadelphia Newspapers, Inc. v. Hepps, 474 U.S. 767, 776 (1986).

foods, there is very little room for public debate about food safety.

The departure in agricultural product disparagement law from common-law definitions of falsity is also notable. Under common law, if a statement could reasonably be true, then it is not false. One of the statements examined by the *Auvil* court illustrates this point: "The most cancer-causing agent in our food supply is a substance sprayed on apples to keep them on the trees longer and make them look better."[40] As indicated by the district court, given the evidence, this statement could be true, and accordingly, "it cannot be proven false."[41] Thus the dichotomy: if possibly true, then not legally false.

Agricultural product disparagement laws turn this dichotomy on its head. Now, what is only possibly true may be legally false. Indeed, unless a statement can be supported by reasonable scientific evidence (whatever that is), it is presumptively false. In short, in the agricultural product disparagement world, "truth" is only found among reasonable scientists. One might question who these reasonable scientists are. Are they the ones that agree with a certain proposition? Are they ones with certain credentials? Or, are they the scientists that would qualify as an expert in court? Or, are they any person with a degree in science who proffers his or her opinion? These are but a few of the possibilities. Since this issue is not explained in the statutes, again, judicial interpretation will be needed. As suggested here, however, a court has a variety of standards it could use in

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[40]Auvil, 67 F.3d 816, 821 (9th Cir. 1995).

[41]Auvil, 800 F. Supp. 928, 936.

determining the type of scientific evidence needed.

In product disparagement, in addition to proving the truth of the statements, plaintiff also bears the burden of proving malice.[42] For example, in *Dairy Stores v, Sentinel Publishing Co.*, the court held that comments about the safety of bottled water must be made with malice in order to be actionable.[43] While not all courts have required actual malice in common law product disparagement cases, most scholars today read the trend that way, and anticipate this as one basis for objections to agricultural product disparagement laws.

There are a wide variety of meanings ascribed to malice; the type and level of proof also varies widely. Generally, however, states have relied on malice defined as knowledge of falsity, or reckless disregard for the truth; or, intent to harm plaintiff. If malice is judicially imposed in an agricultural product disparagement case, most lawsuits will not reach the judgment stage, since the statutes have a lower standard, or no standard, of intent. For example, Alabama has no requirement as to intent; others provide a lower standard of intent, that the defendant knew the statement was false, not clearly indicating whether defendant also had to act with malice. These states include Mississippi, South Dakota, and Texas.

Some statutes leave the issue of malice ambiguous; these states are: Louisiana, North Dakota, Ohio, and Oklahoma. The model bill has a mixed

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[42]Zerpol Corp v. DMP Corp., 561 F. Supp. 404 (ED Pa 1983); Scott Paper Co. v. Fort Howard Paper Co., 343 F. Supp. 229 (ED Wis. 1972).

[43]516 A.2d 220 (N.J. 1986).

standard. For compensatory damages only willful or purposeful dissemination is required. However, for punitive damages, a showing of malice is the prerequisite. Legal scholars contend that actual malice is required to meet the test of the seminal Supreme Court case, *New York Times v. Sullivan*.[44] In that case, the Court held that if defamation of a public figure is at issue, actual malice is a necessary element of the claim. Since *Sullivan* was a defamation case and since it involved a public figure, the applicability to agricultural product disparagement litigation is debatable, however.

First amendment jurisprudence on defamation against a person or corporation also holds that a plaintiff will only be able to recover if the alleged defamatory statement was about that particular plaintiff.[45] This has become known as the "of or concerning" element of defamation.[46] Only Idaho's statute attempts to limit an agricultural disparagement action to those involving plaintiff's specific product. Without proof that the disparaging comment was about plaintiff's product, a statement may be rude, abusive, crude, or in some way objectionable, but is not justiciable, unless made about a particular person or corporation.

For example, in any state other than Idaho, a statement that "potatoes are rotten" would allow any potato grower (and perhaps others depending on a state's restrictions on standing) to sue for damages under the state's agricultural product

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[44]*Ibid.*, 150.

[45]Only Idaho's law has an "of or concerning" element. Idaho Code §§ 6-2001 to -2003 (Supp. 1995).

[46]*See, e.g.*, Zerpol Corp v. DMP Corp., 561 F. Supp. 404 (ED Pa 1983); Eagle's Eye inc v. Ambler Fashion Shop. Inc., 627 F. Supp. 856 (ED Pa 1985).

disparagement statute. This is quite a departure from prior common law of product disparagement and defamation. The Supreme Court has only reached the merits of one product disparagement case, *Bose Corp v. Consumers Union of United States, Inc.*[47] Some of the principles one can derive from *Bose* provide insight into how the Supreme Court may ultimately interpret agricultural product disparagement legislation.

In *Bose*, for example, the plaintiff sued because a specific speaker system designed and manufactured by plaintiff's company, Bose, was reviewed in Consumer Reports. Bose could not have sued had Consumers Union made a general statement that stereo speakers were of poor quality. Agricultural product disparagement statutes, however, allow plaintiff's to sue based on generic or broad, non-product specific statements. Since agricultural product disparagement statutes are general, i.e., they lack the "of and concerning" element, scholars believe they will not pass constitutional muster.[48]

The Supreme Court's seminal case addressing the "of and concerning" element in a public-figure defamation case is *Sullivan*. In that case, an advertisement appeared in the New York Times that did not fully identify plaintiff by name, a city commissioner of Alabama who supervised the police department. The Court rejected the analysis of the Alabama Supreme Court that plaintiff met his prima facie burden, because readers may have inferred that the advertisement

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[47]692 F.2d 189 (1st Cir. 1982) aff'd 466 U.S. 485 (1984) reh denied 467 U.S. 1267 (1984).

[48]Bederman et al., "Of Banana Bills," 160-61.

referred to plaintiff. The Court disagreed: "[T]he evidence was constitutionally deficient in...[that]...it was incapable of supporting the jury's finding that the allegedly libelous statements were made 'of and concerning' the plaintiff."

Although the Supreme Court has not had the opportunity to consider whether an "of and concerning" element is necessary for a claim to be constitutional under an agricultural disparagement statute, there are sound arguments that if given such an opportunity, the Court would impose that requirement. The Court has previously reasoned that an "of and concerning" element is necessary in defamation cases in order to limit the universe of claims that abridge free speech. Since free speech is highly valued, only a discrete, circumscribed set of facts gives rise to a cause of action. And, at least the malice prong of *Sullivan* was applied in the Supreme Court's only foray into product disparagement law in *Bose*, although the Court specifically stated it was not deciding whether all of the *Sullivan* principles applied to product disparagement cases.

Scholars are also critical of agricultural product disparagement laws since states are benefitting one group of business owners while unduly, and therefore, goes the argument, unconstitutionally, abridging the speech of critics of food products.[49] Critics also contend that the statutes are too vague to pass rigorous constitutional review. The Supreme Court has noted two policies that support striking down impermissibly vague statutes: first, citizens should know what constitutes illegal conduct so that they have the opportunity to govern themselves

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[49]Bederman et al., "Of Banana Bills," 54.

accordingly, and second, in an effort to curb arbitrary or subjective application of the law by officials, vague laws should be avoided.[50] "The general test of vagueness applies with particular force in the review of laws dealing with speech."[51] With respect to the agricultural disparagement statutes, critics point to the lack of guidance as to "reliable scientific inquiry, or data." Scientific information can be gleaned from a myriad of sources; the statutes do not identify whose science a party may rely on in proving their case or defense. Nor do the statutes attempt to explain what reasonable or reliable means.

Although the central arguments in opposition to agricultural product disparagement laws have been the lack of an "of and concerning" element, the level of intent, burden of proof, and falsity, the damage provisions have also been criticized. Johnson and Stahl (1998) write that some of the statutes unconstitutionally allow for punitive damages without a showing of actual malice. In their opinion, punitive damages are not permissible in the absence of a finding of malice. This, they believe, is the significance of another Supreme Court case, *Gertz v. Robert Wech, Inc.*, to agricultural product disparagement lawsuits.[52] Alabama, Florida, Georgia, Louisiana, Ohio, and Oklahoma arguably fall within this class of statutes that allow for punitive damages without a concomitant showing of malice. To the extent the statutes provide injunctive relief and may be classified as a "prior restraint" on free speech, they may also be unconstitutional.

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[50]Grayned v. City of Rockford, 408 U.S. 104, 108-09 (1972).

[51]Hynes v. Mayor and Council of Oradell, 425 U.S. 610, 620 (1976).

[52]418 U.S. 323, 349-50 (1974).

Not widely articulated is the idea that statutes must not favor one group to the harm of others (Johnson and Stahl 1998). In constitutional case law this is known as "viewpoint neutrality." Obviously, agricultural product disparagement legislation benefits farmers and pesticide manufacturers while restricting the speech of environmentalists and others interested in food safety. Others have also made the argument that agricultural product disparagement statutes are impermissibly vague (Smolla 1999).[53]

Scholars have also highlighted some of the policy concerns that they think make agricultural product disparagement laws unpalatable. In particular, they point out that discussions of significant public interest should not be restricted. Thus, these scholars find comfort in some of the Supreme Court's grandiose statements about free speech. In *Sullivan*, for example, the Court states: "[W]e consider this case against a profound national commitment to the principle that debate on public issues should be uninhibited, robust, and wide-open."[54] Food safety, some scholars contend, is the quintessential issue of significant public interest. As articulated by the district court in *Texas Beef Group v. Winfrey*: "It would be difficult to conceive of any topic of discussion that could be of greater concern and interest to all Americans than the safety of the food that they eat."[55] Agricultural disparagement

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[53]Grayned v. City of Rockford, 408 U.S. 104, 108-09 (1972)(vague laws should be avoided so that citizens are put on notice of law and to avoid arbitrary application of law by officials.) Hynes v. Mayor and Council of Oradell, 425 U.S. 610, 620 (1976)("The general test of vagueness applies with particular force in review of laws dealing with speech.").

[54]516 U.S. at 270.

[55]11 F. Supp. 2d 858, 862 (N.D. Tx 1998).

laws are designed to stifle public discussion about pesticides in food and food-borne illnesses. However, none of the arguments put forth by scholars opposed to agricultural product disparagement legislation has been tested in a court, as more fully explored below.

Case Law Involving Claims Under Agricultural Product Disparagement Statutes

Five cases have involved agricultural product disparagement claims. Only two of those cases resulted in published opinions. None of the cases reached the agricultural product disparagement claim on the merits, but were dismissed or withdrawn prior to the full adjudication of the agricultural disparagement claim or claims. Of the five cases, three originated in Texas, one in Georgia, and one in Ohio. By far the most well known case is that in which popular television host Oprah Winfrey was sued by a group of cattle ranchers. The other two Texas cases involved statements about emus and turf grass. The Ohio case concerned the sale of allegedly old eggs. The plaintiffs in the Georgia case were not concerned about an alleged disparaging statement per se, but rather were public interest groups seeking a judicial declaration as to the constitutionality of Georgia's agricultural product disparagement statute. Each of these cases is discussed below.

In *Texas Beef Group v. Winfrey*,[56] Texas cattlemen sued Oprah Winfrey for the statements made by an animal-rights activist on her television show aired on April 16, 1996. The activist, Howard Lyman, was also sued. Among their claims,

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[56]11 F. Supp. 2d 858 (N.D. Tx 1998). The description of the *Winfrey* case is taken from the district court opinion.

the plaintiffs argued that Lyman's statements violated Texas' agricultural product disparagement statute. During the April 16 program Lyman's assertion that Bovine Spongiform Encephalopathy, more commonly known as "mad cow" disease, "could make AIDS look like the common cold." In response, Ms. Winfrey exclaimed: "It has just stopped me cold from eating another burger."

The trial court in that case granted the defendant's motion for summary judgement as to the agricultural product disparagement claim. The court found that the claim could not be sustained for two reasons: one, cattle were not "perishable" within the meaning of the statute;[57] two, assuming *arguendo* that the cattle were perishable, plaintiffs failed to present evidence that defendants knew the statements about cattle were false.[58] In fact, noted the court, some of plaintiff's evidence suggested that at least part of what Lyman said had a factual basis in the practice of cattle raising.[59] Although that part of the opinion is dicta, it suggests that a court may liberally interpret the "reasonable and reliable" scientific standard in considering whether a statement is legally false. However, most significantly, the court did not address whether or not Texas' statute was Constitutional, but disposed of the claim by finding that plaintiffs lacked standing.

On appeal, the United States of Appeals for the Fifth Circuit upheld the lower court decision.[60] The court assumed the burden of proof rested on plaintiffs to show

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[57]11 F. Supp. 2d at 863.

[58]*Ibid.*

[59]*Ibid.*

[60]201 F.2d 680 (5th Cir. 2000).

that defendant knowingly made a false, defamatory statement. Texas is one of the states that did not include a provision for burden of proof (Table 5). According to the court, plaintiffs failed to meet this burden: the statement about Mad Cow disease had an accurate factual basis, i.e., ruminant-to-ruminant feeding. Again, similar to the lower court, the appellate court was willing to use a relaxed interpretation of "reasonable and reliable" scientific evidence. The court did not seem interested in taking a "hard look" at the scientific basis for Lyman's statements. Moreover, that statement was not intended to be factual, but was intentionally exaggerated, or as the court said: "His [Lyman's] statement comparing Mad Cow Disease to AIDS was hyperbolic, and Winfrey highlighted the statement as 'extreme' during the show's broadcast."

In the other published decision, *Action for a Clean Environment v. Georgia*,[61] two environmental groups, Action for a Clean Environment, and Parents for Pesticide Alternatives, sought a declaratory judgment as to the constitutionality of Georgia's agricultural product disparagement act. The court of appeals affirmed the lower court judgment dismissing the lawsuit. The court held that there was no controversy or live dispute between the plaintiffs and the defendant, the state of Georgia. Again, like the *Texas Beef* case, the constitutionality of the agricultural product disparagement statute was not addressed on the merits.

Three other lawsuits have been filed under agricultural product disparagement laws. However, none of these appear in reported decisions. In one

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[61]217 Ga. App. 384 (1995).

Texas case, the owner of a grass farm sued a state agricultural agent.[62] The agent, James McAfee, Ph.D., had contributed to an article that had appeared in the Dallas Morning News gardening section. In the article McAfee indicated that a certain type of grass identified as Texturf 10 was "very susceptible to disease" in the humid conditions of the Dallas metropolitan area, and "just wasn't happy here" (Leatherby and Simon 1998). The plaintiff was the owner of A-1 Turf Farm which grew 80% of the commercial Texturf in Texas. The judge dismissed the case finding that grass was not a perishable food product.[63] Again, the merits of the agricultural product disparagement claim were not reached.

In a case involving emus, *Burleson Enterprises, Inc. v. American Honda Motor Co., Inc.*,[64] plaintiffs used the Texas agricultural product disparagement statute to sue Honda Motor Co.[65] Plaintiffs were a group of nine ranchers who raised emus as commercial livestock. Honda had televised a commercial in which emus were used to suggest that some deals are fraudulent and should be avoided. The commercial depicted a fictitious young man attempting to choose a job. Emus were referred to as the "pork of the future," a statement that allegedly cast emus in

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[62]This account of the turf suit is based on Ann Hawke, "Veggie Disparagement," *The Quill* 86 (1998): 13-15.

[63]Elizabeth Allen, "Bill Filed Opposing 'Veggie Libel' Law," *San-Antonio Express News*, 19 December 1998, 10.

[64]U.S. Dist. Ct. N.D. Texas, 2-97-CV-398, 1998.

[65]"The account of the facts of this case are taken from Kay Ledbetter, "Judge Considers Motion for Dismissal in Texas Emo Producers' Lawsuit," *Amarillo Daily News*, 31 March 1998, 10; Hawke, "Veggie Disparagement;" Margaret A. Jacobs, Produce," *Wall Street Journal*, 25 February 1998, B5.

a poor light to Jews and Muslims. The case was dismissed before the Constitutionality of the agricultural product disparagement statute was adjudicated.[66]

In the fifth known case, *Agricultural General Co. v. Ohio Public Interest Research Group*, an egg producer sued a public interest group, Ohio Public Interest Research Group (PIRG), and one of its employees, Amy Simpson, for statements the group made at a press conference.[67] Simpson had reported that Buckeye washed, re-packaged, and sold old eggs. Specifically, at a March 1997 press conference, Simpson stated: "We have no idea how many, if any, consumers have been made ill by consuming these eggs." The story was also carried by NBC's program Dateline. The lawsuit was eventually withdrawn by defendants without a determination as to the Constitutionality of the agricultural product disparagement statute.[68]

The paucity of case law can not be easily attributed to the length of time the statutes have been effect, or because negative statements about farm produce are so rare. Neither of these suggestions is accurate. Ten years of legislation, particularly that which received media attention, can not account for the limited number of lawsuits. Food scares and public interest groups or the press publicizing health risks associated with foods are not uncommon. The value of agricultural

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[66]Ronald K.L. Collins, and Jonathan Bloom, "Win or Lose, Dissing Food Can be Costly," *National Law Journal*, 8 March 1999, A21.

[67]This account of the facts of this case are taken from Ronald K.L.Collins, "Veggie Libel."

[68]Vindu P. Goel, "Buckeye Egg Farm Drops Suit Against Ohio Consumer Group," *Cleveland Plain Dealer*, 7 July 1998, 2C.

product disparagement statutes to agricultural businesses is in the threat they pose. Once found unconstitutionally, obviously, the threat will no longer exist.

Summary

Agricultural product disparagement statutes do not vary substantially with the exception of Idaho's law. While legal scholars have almost universally condemned them as unconstitutional, no court has addressed this issue. Until the statutes are repealed or a case reaches the Supreme Court, the laws will remain valid. Indeed, very few cases are making their way through the judicial system, raising the question about the effect these new laws may have on the discourse about food safety. It appears that agricultural disparagement legislation is here to stay, and may even be enacted by additional states in the future. This leads to the subject of the next chapter. In Chapter 3 the variables and hypothesis used to test the influences on bill passage are identified and discussed in more detail.

Chapter 3

RESEARCH MODEL, VARIABLES, and HYPOTHESES

Summary of Research Model

This chapter presents the variables, and hypotheses. The central research question is: what are the political and socioeconomic determinants of agricultural product disparagement bill passage? Or, what factors predict whether or not a state is likely to pass an agricultural product disparagement bill? More precisely, is a Republican, conservative state which does not have a demonstrated commitment to environmental values, and in which agricultural business interests are strong but free-speech and environmental activists are weak, more likely to pass an agricultural product disparagement bill.

Variables and Hypotheses

The unit of analysis is a state in a given year in which a legislature considered an agricultural product disparagement bill.[1] There are fifty-eight cases. The dependent variable is bill outcome. That is, a bill is either passed into law and coded 1, or is fails at some stage of the legislative process, and is coded 0. Thus,

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[1]Small data sets have been used in prior research also using logit models. Arnold Fleischmann, and Lana Stein, "Campaign Contributions in Local Elections," *Political Research Quarterly* 51(3) (1998): 673-89.

the dependent variable is dichotomous. There are eight hypothesized predictors of bill outcome. These independent variables are: partisanship; ideology of citizens; state commitment to the environment; and, interest group support and opposition, including agriculture or farmers, both non-aquaculture and fishing, pesticide manufacturers, free-speech advocates, and environmental groups. A summary of these variables, and their source and coding, is provided in Table 6, below.

TABLE 6:

VARIABLES

VARIABLE	INDICATOR	SOURCE	CODED
Partisanship	Party control of government	U.S. Statistical Abstract	1 - Republican majority in both houses and governor; 0 - Otherwise
Ideology	Weighted score of citizenship conservatism from survey data	Erikson et al. 1993	From least conservative score of 21.2 to most conservative score of 46.9
Support for Environmental Quality	Percent of state's general expenditure for environmental protection	Book of the States	Actual dollars per state (converted to real dollars)
Farming Interest	Farm income (including aquatic)	U.S. Census	Actual dollars per state (converted to real dollars)
Pesticide Interest	Cost of pesticides as percentage of gross state product	U.S. Census	Actual percentage per state (converted to real dollars)
Free-Speech Interest	Number of lawsuits in which the ACLU was a party for ten years prior to bill passage	Westlaw	Actual number per state
Environmental Interest	Environmental interest group membership	Sierra Club	Number of members in Sierra Club per 1,000 in state population

To test political influences, partisanship, ideology, and interest-group support and opposition will be considered. Although there have been mixed results with regard to the influence of party affiliation, party politics have been consistently studied by political scientists, often with positive results. Frequently, scholars have reported the nexus between passage of environmental regulation, and the Democratic party (Calvert 1989). It is not uncommon to see Democrats fighting for stricter restrictions on pesticide use.[2] In contrast, Republicans are generally more willing to pass legislation beneficial to business interests (McCloskey 1971).

Indeed, it is not uncommon to see a Republican sponsoring agricultural product disparagement legislation, as was the case in Wisconsin. There, Rep. Eugene Hahn, R-Cambria, introduced that state's bill (Krome 1998). Agricultural product disparagement laws are considered anti-environment, since they are designed to suppress public dialogue about pesticides and food safety. They are, then, favorable to agricultural businesses. Agricultural businesses include farmers and chemical companies that manufacture pesticides.

The policy rationale behind agricultural product disparagement legislation is that agricultural businesses should be insulated from the economic fall-out that follows a food scare, such as the Alar incident discussed in Chapter One. As noted by Hagy (1998:885), agricultural product disparagement "statutes serve the legitimate state's purpose of demonstrating the enacting state's support of the agricultural industry. In the information age where news reports and even internet

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[2]"Pesticides: Daminozide Posed No Serious Health Risk, Others Say in Controversy's Anniversary," *Chemical Regulation Reporter* 15 (1992): 1686-87.

rumors travel the globe in an instant, it is important for states to demonstrate their commitment to protecting their vital industries from injurious falsehood." Stories of farmers adversely affected by Alar-type scares have been frequently reported in the popular press. For example, one farmer in Texas was quoted as lamenting the fact that a 1991 outbreak of salmonella poisoning traced to melons caused farmers to plough-up 75% of their crop (Allen 1998). California's attempts to pass agricultural disparagement legislation have been linked to hepatitis-tainted strawberries eaten by school children (Morrison 1997). Indeed, food scares occur on a fairly regular basis. In 1993, e. coli bacteria in hamburgers caused several deaths of children.[3] In 1996, strawberries purportedly caused an outbreak of cyclospora. Loses to the California industry alone ranged from 20 million to 40 million.[4] Tainted shellfish are a perennial topic in the press.[5]

Concerns about the economic fall-out from food scares have resounded across the states. According to the Ohio Farm Bureau, which lobbied for Ohio's agricultural product disparagement law, "An anti-disparagement law is needed because incidents such as the Alar scare several years ago" (Rampton and Stauber 1998:141). Or, put more bluntly by opponents of the bills: "Part of the reason for enacting [agricultural product disparagement laws] is to scare the health critics, to scare the environmental groups, and to scare the media from covering health risks"

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[3]Associated Press, "E. Coli in Cattle Said Common: Health Measures Adequate," Baton Rouge (LA) *Advocate*, 1 March 2000, 8A.

[4]"Support Grows for 'Veggie Libel' Law," *San Antonio Express-News*, 28 August 1997, 18A.

[5]Russ Bynum, "CDC: Oysters Caused Record Sickness in '97," Baton Rouge (LA) *Advocate*, 12 June 1990, 4B.

(Jaffee 1997). Indeed, the legislative intent of all bills is to protect agricultural businesses. Delaware is typical in this regard. There, the bill includes a statement of legislative intent that "production of agricultural and aquacultural food products constitutes an important and significant portion of the State economy, and...is beneficial to the citizens of th[e] State to protect the vitality of the agricultural and aquacultural economy by providing a cause of action for produce and perishable agricultural food products to recover damages for the disparagement of any perishable agricultural or aquacultural food product."[6]

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[6]Delaware S.B. No. 311, 13th Gen. Assem. 1991.

TABLE 7:

HYPOTHESES

1. A state is more likely to pass an agricultural product disparagement bill if there is Republican Party unity in the house, senate, and governor's office.
2. A state is more likely to pass an agricultural product disparagement bill if the citizenry of that state is politically conservative.
3. A state with weak commitment to the environment is more likely to pass agricultural product disparagement legislation.
4. A state in which farming interests are strong is more likely to pass an agricultural product disparagement bill.
5. A state in which the presence of the pesticide industry is strong is more likely to pass agricultural product disparagement legislation.
6. A state in which environmental public interest groups are not active, is more likely to pass an agricultural product disparagement bill.
7. A state in which free speech public interest groups are weak is more likely to enact agricultural product disparagement legislation.

As indicated in Table 7, the following hypothesis reflects the role of political partisanship in bill passage: *Hypothesis 1: A state is more likely to pass an agricultural product disparagement bill if there is Republican Party unity in the house, senate, and governor's office.* Partisanship is indicated by Republican control of the governorship and both houses of the legislature.[7] States in which the majority of both houses and governor are in control were coded 1; if those conditions were not met, a state was coded 0 (Hwang and Gray 1991). Data was obtained from the U.S. Census Bureau.

Another popular political variable is ideology (Hedge and Scicchitano 1993; McIver et al. 1994; Hays et al 1996). In a liberal environment, more environmental regulation is passed (Hedge and Scicchitano 1993; Ringquist 1994; Hays et al. 1996), and more liberal representatives are elected (Hays et al. 1996:56). Conservative citizens may also see their ideology reflected in legislative choices (Wright et al. 1987). One would expect agricultural product disparagement legislation to appeal to a conservative populace, or at least not be offensive to them. As discussed previously, agricultural product disparagement laws are designed to protect agribusinesses; a conservative state will usually support policies beneficial to business.

Since many researchers have found that both ideology and party control are significant, both are included as variables here (Englebert 1961; Trop and Ross 1971; Schneier 1970; Clausen 1973; Ritt and Ostheimer 1974). It is important to

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[7]Nebraska is, obviously, an anomaly.

include both ideology and partisanship, since Republicans may not necessarily be conservative, nor have Republicans consistently supported agricultural product disparagement legislation. In Texas, for example, Republican Brian McCall (R-Plano) has been a vocal opponent of that state's law.[8] At the same time, the sponsor of the bill, Rep. Bob Turner, was a Democrat. Texas' Republican governor, George W. Bush, refused to support that state's agricultural product disparagement law, contending it would encourage frivolous litigation (Parks 1997). Republicans in California have also opposed that state's legislative efforts to pass agricultural product disparagement legislation.[9] Moreover, Democratic legislators have sometimes supported agricultural product disparagement legislation, as was the case recently in Arkansas (Taylor 1999).

Legislators may also be influenced by the values of their constituents. Thus, ideology of the citizenry may be relevant. In a recent League of Conservative Voters Poll, 73% of those polled indicated that they would vote for a pro-environment candidate over a candidate that thought business was over-burdened with regulation. Of the thirteen states passing legislation, all have high conservative scores on the Erikson et al. (1993) scale. It is reasonable, then, to empirically test in this study whether states with a conservative populace are more likely to pass an agricultural product disparagement law. The following hypothesis is appropriate: *Hypothesis 2: A state is more likely to pass an agricultural product disparagement*

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[8]"Footnotes," *Houston Chronicle*, 9 May 1999, 10.

[9]"'Veggie Libel' Reconsidered in California," *Los Angeles Times*, 22 August 1997, 21.

bill if the citizenry of the state is politically conservative. Erikson's et al. (1993) index will be used for this purpose (Reams 1990; Radcliff and Davis 2000). Erikson et al. ranked states from those that were least conservative of 21.2 to most conservative of 46.9, based on statistical analysis of survey data.

In addition to Republican party control and conservative ideology, whether a state does not support environmental quality may provide a climate for agricultural product disparagement bill passage. Environmental resource commitment has also been used as a variable in prior research (Khator 1993; Ringquist 1993). The literature suggests that a state's environmental commitment is a significant factor in analyzing policy adoption (Lester 1990:72). Indeed, a number of studies include reports of an association between environmental commitment and adoption of pro-environmental policies (Curtis and Creedon 1982; Miller 1991).

Again, as agricultural product disparagement statutes are considered anti-environmental, one might expect that they would not fare well in a state with a strong commitment to the environment. The third hypothesis includes environmental commitment as a variable: *Hypothesis 3: A state with weak commitment to the environment is more likely to pass agricultural product disparagement legislation.* Commitment to the environment can be measured by a state's environmental expenditures for the year or years a bill was considered (Khator 1993; Miller 1991). Data was abstracted from *The Book of States*. Expenditure values were converted to constant 1995 dollars.

Another relevant variable is interest group pressure. Given the theoretical and empirical literature, the role of interest groups can not be ignored in a study of

bill passage at the state level. As indicated in Chapter One, there is no doubt that interest groups are growing in size and perhaps influence. Moreover, some states are more likely to be influenced by interest groups than others. According to an exhaustive study prepared by Thomas and Hrebenar (1994), the amenability of a state to be influenced by an interest group can be categorized into five groups, ranging from states that are practically dominated by interest groups to those in which interest groups effectively have no influence. Those findings are summarized in the chart Thomas and Hrebenar originally created, reprinted here as Table 8.

TABLE 8:

INTEREST GROUP INFLUENCE BY STATE

Dominant	*Dominant/ Complementary*	*Complementary*	*Complementary/ Subordinate*	*Subordinate*
Alabama	Alaska	**Colorado**	Delaware	
Florida	**Arizona**	Connecticut	Minnesota	
Louisiana	Arkansas	Indiana	Rhode Island	
New Mexico	California	Maine	**South Dakota**	
Nevada	**Georgia**	Maryland	Vermont	
South Carolina	Hawaii	Massachusetts		
West Virginia	**Idaho**	Michigan		
	Illinois	Missouri		
	Iowa	New Hampshire		
	Kansas	New Jersey		
	Kentucky	New York		
	Mississippi	North Carolina		
	Montana	**North Dakota**		
	Nebraska	Pennsylvania		
	Ohio	Utah		
	Oklahoma	Washington		
	Oregon	Wisconsin		
	Tennessee			
	Texas			
	Virginia			
	Wyoming			

Source: Thomas and Hrebenar (1994). Enacting states are indicated in bold.

A majority of the states, or nine, which have passed agricultural product disparagement legislation are either classified as "dominant" or "dominant/complementary." According to Thomas and Hrebenar (1994:152), in dominant states, interest groups "are the overwhelming and consistent influence." If a state is classified as dominant/subordinate, this means that it vacillates between being dominant and complimentary. In a complimentary state, interest groups are constrained by other political forces, and do not enjoy the almost unbridled reign one would expect in a dominant state. Not insignificantly, Thomas and Hrebenar also note that most dominant states are located in the Southern and Western portions of the country. For the purposes of this study, the Thomas and Hrebenar research provides support for the hypotheses concerning interest group power, namely industry, farmers, and environmentalists may have been influential in determining bill passage.

Farmers and those involved in agricultural businesses have been found less pro-environmental than others (Buttell and Flynn 1978; Trembley and Dunlap 1978; Calvert 1989). As qualitative research indicates, agricultural product disparagement bills were drafted by and at the behest of agricultural concerns, as were lobbying efforts on behalf of their passage (Bederman 1997:145; Lynch 1998). In Missouri, for example, Rep. Sam Leake stated that he supported agricultural product disparagement legislation after lobbying efforts of farmers and ranchers (Unlenhuth 1998). The American Feed Industry Association (AFIA) engaged Dennis Johnson, Esq. of the Washington, DC law firm Olsson, Frank, & Weeda to draft model agricultural product disparagement legislation (Allen 1998). At least three of the

bills (Colorado, Texas, and Missouri) were sponsored by legislators who consider themselves farmers or ranchers.[10] Both the AFIA and the American Farm Bureau Federation (AFBF) distributed model agricultural product disparagement bills to state farm bureaus (Margiotta 1998; Rampton and Stauber 1998).

In North Dakota, for example, a rancher's association was purportedly the force behind that state's agricultural product disparagement law (Mattson 1998). McDonald (1998) notes that in North Dakota "[t]he bill's primary backers were the North Dakota Agricultural Coalition, composed of thirty statewide agricultural organizations ranging from buffalo ranchers to pea growers, as well as bankers and the state's chamber of commerce, the North Dakota Farmers Union and Farm Bureau, the North Dakota Stockmen's Association, and the North Dakota Medical Association."

Similarly, in California, the Western Growers Association and the California Farm Bureau Federation pushed for the passage of an agricultural product disparagement bill (Groves 1997). A similar scenario occurred in Colorado. There, the Cattlemen's Association, the Cattle Feeders Association, the Colorado Farm Bureau, and the Colorado Dairymen were behind that state's agricultural product disparagement bill (Coates 1991). Again, in Maryland, the Delmarava Poultry Industry, Inc. purportedly ushered a bill through the legislature (Brennan 1997). The lobbying efforts are not surprising, since agriculture is a significant industry for many states, as indicated in Table 9.

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[10]Opinion, *Kansas City Star*, 17 January 1998, 15.

TABLE 9:

PRODUCERS OF TOP FIVE CROPS

	SOYBEANS	WHEAT	POTATOES	GRAPES
Iowa	Iowa	***North Dakota***	***Idaho***	California
Illinois	Illinois	Kansas	Washington	Washington
Nebraska	Minnesota	Montana	California	New York
Indiana	Indiana	Washington	Oregon	***Arizona***
Minnesota	***Ohio***	***South Dakota***	Wisconsin	Pennsylvania
Ohio	Missouri	***Idaho***	***North Dakota***	Oregon
Kansas	Nebraska	Minnesota	***Colorado***	Michigan
Wisconsin	Arkansas	***Oklahoma***	Minnesota	Arkansas
Texas	***South Dakota***	Colorado	Maine	***Georgia***
Missouri	Kansas	Nebraska	Michigan	***Ohio***

Source: Statistical Highlights 1997-98: Farm Economics, Cash Receipts.
States indicated in bold are those which have agricultural disparagement laws.

Nine of the thirteen enacting states produce a significant portion of the top five food crops. Those states are Arizona, Colorado, Georgia, Idaho, North Dakota, Ohio, Oklahoma, South Dakota, and Texas. The top five crops are significant revenue generators, as indicated in Table 10. If we were to account for cotton production, we could add Alabama, Louisiana, and Mississippi to the states that both have an agricultural product disparagement statute and are a significant producer of a top agricultural product. Only one enacting state, Florida, is not a producer of at least one of the five top food commodities or of cotton. Florida is, however, what one might describe as a "farm state." It is a significant producer of the following top twenty-five products: greenhouse products, tobacco, oranges, tomatoes, lettuce, and peanuts.

TABLE 10:

VALUE OF FIVE LEADING FOOD CROPS IN THE UNITED STATES
IN MILLIONS OF DOLLARS

	CORN	SOYBEANS	WHEAT	POTATOES	GRAPES
Value	21,573	16,211	9,956	2,699	2,334

Source: Statistical Highlights 1997-98: Farm Economics.

In short, agriculture is a significant portion of the economy in all of the states which have passed an agricultural product disparagement bill. Given agricultural businesses concern with food scares, it is not surprising that farmers would support agricultural product disparagement legislation. Indeed, with the groundswell of opposition to genetically-modified foods, farmers have even more incentive to attempt to limit open discussion about food safety (Roosevelt 2000).

There is also reason to believe that agricultural interests should not be limited to land-based (non-aquatic) farming. The fishing industry has been particularly interested in the passage of agricultural disparagement bills. The National Fisheries Institute, for example, has threatened to sue animal rights activists pursuant to agricultural product disparagement laws (Rauber 1998). The legislation in Arkansas was driven by allegedly false reports about unsafe dioxin levels in Arkansas catfish.[11] Moreover, agricultural product disparagement bills often include a provision of legislative intent which contains a declaration regarding the role of aquaculture to a state's economy, sometimes irrespective of whether this can be factually supported. Only one state, California, has commissioned a study to determine whether or to what extent disparaging comments adversely affect agricultural business profits.[12] As a provision for aquaculture was not part of the model legislation distributed by the AFIA, it appears some legislatures have made a conscious choice to extend coverage to protect their fishing industry.

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[11]Philip Taylor, "Arkansas House Passes Goof-Libel Bill," 10 March 1999; available from http://www.freedomforum.org/speech/1999/3/10arfoodlibel.asp.

[12]CA S.B. 1334, Reg. Sess., 1997.

Bills that have a provision covering aquaculture include: Delaware, Massachusetts, Mississippi, Ohio, Pennsylvania, South Carolina, Texas, Alabama, Georgia, and Louisiana. Other bills have included aquaculture in the definition of agricultural product. For example, a Maryland bill was written so that "agricultural food product means any agricultural or aquacultural food product."[13] Of the thirteen passing states, aquaculture is a significant industry in only four, Alabama, Florida, Idaho, and Mississippi.[14] To analyze farming influence, the following hypothesis will be tested: *Hypothesis 4: A state in which farming interests are strong is more likely to pass an agricultural product disparagement bill.* Data for this variable is farm income obtained from the U.S. Agricultural Census (Ringquist 1994). Income values were converted to constant 1995 dollars.

Not only farmers, but other agricultural businesses may have been interested in agricultural product disparagement legislation. Many believe that the lobbying efforts of agricultural businesses and their associations significantly affected the passage of agricultural product disparagement bills (Bederman 1997; Margiotta 1998). Theoretical research has suggested that industry will lobby for beneficial regulation (Stigler 1971). As indicated in Table 11, other research has reported the significance of business interest groups in the United States.

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[13]H.B. 1370, 1998 Reg. Sess., 1998.

[14]Based on sales as a percentage of GSP, obtained by the U.S. Census.

TABLE 11:

THE MOST INFLUENTIAL INTEREST GROUPS IN THE STATES

General Business Associations (53)
Utility Companies (47)
Lawyers (40)
Health Care Organizations (39)
Local Government Organizations (37)
Insurance (36)
Traditional Labor Associations (35)
Manufacturers (35)
Farm Organizations (34)
Physicians and State Medical Associations (34)
Bankers (32)
State and Local Government Employees (32)
Environmentalists (25)

Source: Thomas and Hrebenar 1996. Numbers in parentheses indicate number of states which cited that interest group as most or moderately effective.

As stated by (Hedge 1998:72), "business organizations and trade associations still dominate interest group politics in the 1990s." According to one opponent of agricultural product disparagement legislation, "industry has fostered the false perception that the 'veggie libel' statutes are necessary to counteract an epidemic of 'junk science'" (Altshuler 1998).

Others have posited that agricultural product disparagement legislation is just another attempt by big business to use what are known as Strategic Lawsuits Against Public Participation (SLAPP) (Rampton and Stauber 1997:139). SLAPPs are lawsuits that are designed to curb free speech by "circulating a petition, writing a letter to the editor, testifying at a public hearing, reporting violations of law, lobbying for legislation, peacefully demonstrating, or otherwise attempting to influence government action" (Pring and Canan 1996:1). They have been described as a "new strain of virus...carry[ing] dire consequences for individuals, communities, and the body politic" (Pring and Canan 1996:1).

As described by one judge: "The longer the litigation can be stretched out...the closer the SLAPP filer moves to success. Those who lack the financial resources and emotional stamina to play out the 'game' face the difficult choice of defaulting despite meritorious defenses or being brought to their knees to settle...Short of a gun to the head, a greater threat to First Amendment expression can scarcely be imagined."[15] The Alar lawsuit was just one example of a SLAPP

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[15]Statement of J. Nichola Colabella, New York Supreme Court Judge; available from http://www.uwsp.edu/geo/courses/geog100/FactoryFarm-SLAPPLect.htm.

lawsuit; cases under agricultural product disparagement laws would be following suit.

Other evidence that agricultural businesses were behind the passage of agricultural product disparagement bills is shown by the sponsors of the legislation, often farmers or farming associations. The first agricultural product disparagement bill was drafted by Rep. Steve Aquafresca, an apple grower, in Colorado. Lawyers for the American Feed Industry Association (AFIA) drafted model legislation that was distributed to the states by the AFIA and other interested agricultural organizations. The AFIA is a "national trade association representing the manufacturers of more than seventy percent of the primary formula livestock and poultry food sold annually" (Rampton and Stauber 1998:144). AFIA shares office space with another agricultural group that lobbied for bill passage, the Animal Industry Foundation (AIF).

The AIF works in cooperation with a host of agricultural organizations, including the American Farm Bureau Federation, AFIA, American Sheep Industry Association, American Society of Animal Science, American Veal Association, National Broiler Council, National Cattlemen's Beef Association, National Milk Producers Federation, National Pork Producers Council, National Turkey Federation, and Southeastern Egg and Poultry Association of United Egg Producers (Rampton and Stauber 1998). Scholars have made the qualitative assumption that these organizations carry heavy influence in state legislatures, particularly in farm states (Lynch 1998).

Pesticide manufacturers have also expressed their interest in agricultural product disparagement bill passage. An official from Monsanto, a pesticide manufacturer, publicly stated that agricultural product disparagement legislation was a significant issue.[16] Pesticide manufacturers are obviously in the business of assisting in the production of food that is both palatable, and available at a reasonable cost.

Underlying the concern with statements about food safety, is the safety of pesticides. Farming accounts for over half of the land use in the contiguous United States. American farmers use more pesticides than farmers in any other country, at a cost of 19 million dollars.[17] The term "pesticide" does not have a universal definition. It includes man-made chemical agents, such as "insecticides, herbicides, fungicides, rodenticides and fumigants employed to control one or more species deemed to be undesirable from the human view point" (Philip 1993:191) Pesticides also occur naturally (Len Ritter et al. 1997). In the absence of man-made pesticides, average yields may be reduced by up to 70% (Avery 1995). Thus, the use of pesticides is usually considered necessary by agribusinesses as they improve crop yields, lower food costs, and promote consumption of a variety of fruits and vegetables. Numerous studies have reported the health benefits, including decreased risk of cancers and lower instances of coronary heart disease, from a diet rich in fresh fruits and vegetables (Ritter et al. 1997).

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[16]"Barolo Says Streamlining Office Will Enhance Credibility of Process," *Chemical Regulation Reporter (BNA)* 18(32) (November. 4, 1995): 995.

[17]David E. Erwin, C. Ford Runge, Elizabeth A. Gaffy, Willis E. Anthony et al., "Agriculture and the Environment: A New Strategic Vision," *The Environment* 40(6) (1998): 8-12.

The issue of pesticide risk and usage has received even more attention since the passage of the federal Food Quality Protection Act of 1996. Under that act, all pesticides will be subject to new risk assessments and could be denied registration for use in the United States. Like agricultural product disparagement legislation, the passage of the Food Quality Protection Act is also attributed to the Alar scare (Ashton 1999). Agricultural businesses are not only facing unfriendly federal law, but public perceptions and scrutiny about food safety as well. Survey research indicates that consumers want more food safety regulation, rather than less. In responding to the question: "In general, how much government regulation is needed to protect consumers' interests in the area of...food safety? Would you say a lot, some, very little, or none?" Sixty-two percent replied "a lot;" twenty-six percent indicated "some" (Princeton Survey 08/06/98). Thus, it would not be surprising that agricultural businesses would want to control the publication of reports of tainted food in an effort to curb subsequent regulation.

Agricultural businesses are particularly concerned about the regulatory cancellation of one large group of pesticides under the Food Quality Protection Act, organophosphates, or OPs. OPs have been characterized as the pesticide mainstay of American farming.[18] Nationally, OPs are a billion-dollar a year industry (Ingersoll 1998). OPs are applied to most produce consumers purchase, from almonds to onions to watermelon (Gianessi 1997). Cancellation of OPs could be "cataclysmic" for farmers (Byron 1998), since two-thirds of the pesticides applied in

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[18]Phil Zahodiakin, "OPs Should Remain Mainstay in Foreseeable Future, Panelists Tell NRC," *Pesticide & Toxic Chemical News* 26(22)(1999): 10.

this country contain them (Antham 1998). Table 12 summarizes the quantity of OPs applied to American farms in one year, by state.

TABLE 12:

PERCENTAGE OF FARM ACRES TREATED WITH OPS PER STATE

Alabama	**50**	Nebraska	66
Arizona	**40**	Nevada	37
Arkansas	44	New Hampshire	29
California	43	New Jersey	41
Colorado	**62**	New Mexico	69
Connecticut	43	New York	49
Delaware	57	North Carolina	49
Florida	**33**	**North Dakota**	**59**
Georgia	**44**	**Ohio**	**71**
Idaho	**52**	**Oklahoma**	**66**
Illinois	78	Oregon	59
Indiana	68	Pennsylvania	48
Iowa	78	Rhode Island	29
Kansas	46	South Carolina	38
Kentucky	58	**South Dakota**	**70**
Louisiana	**54**	Tennessee	58
Maine	46	**Texas**	**52**
Maryland	27	Utah	45
Massachusetts	44	Vermont	29
Michigan	65	Virginia	57
Minnesota	58	Washington	53
Mississippi	**48**	West Virginia	50
Missouri	53	Wisconsin	76
Montana	44	Wyoming	77

Source: Gianessi 1997.

On the average, enacting states are heavier users of pesticides than other states. Median usage for all states is 50% of the farm acreage per state. Eight of the enacting states are at or above the average usage: Alabama, Colorado, Idaho, Louisiana, North Dakota, Ohio, Oklahoma, South Dakota, and Texas. Only Arizona, Florida, Georgia, and Mississippi are below the average percent.

The significance of OPs to farming is illustrated by the description of the affect of cancellation of an OP on one crop, asparagus: "Special Local needs registrations permit for the organophosphate insecticide disulfoton to be applied to asparagus in California and Washington for control of the asparagus aphid. This aphid was first detected in the West in 1979. The aphids feed by sucking plant juices, causing shrinking, dwarfing and death of asparagus shoots. Natural enemies and diseases have kept the aphid under control in the Eastern U.S., but have not proven effective in the West. Washington State University recently concluded that: Loss of disulfoton would result in total collapse of the California and Washington asparagus industry unless a replacement compound could be made available within one or two years" (Gianessi 1997:15).

Debates over the risks associated with OPs are divided between public interest groups who vociferously argue about their dangers and need for discontinuation, and farming interests, including pesticide manufacturers and individuals or organizations they fund, contending that OPs are safe if used in the prescribed manner. On one hand, for example, are public interest groups, such as the Environmental Working Group and Consumers Union, both of which have published reports intended to expose the dangers of OPs, such as one out of twenty

children consume an unsafe dose of OPs daily.[19] On the other hand, again by way of example, are the American Council on Science and Health and the American Crop Protection Association, which have argued that OPs are a necessary component in the war against bugs and bacteria.[20]

Finally, qualitative researchers have assumed that pesticide manufacturers were a driving force behind agricultural product disparagement legislation (Magiotta 1998; McDonald 1998). The following hypothesis reflects the observation that the pesticide industry lobbied for passage of agricultural product disparagement bills. *Hypothesis 5: A state in which the presence of the pesticide industry is strong is more likely to pass agricultural product disparagement legislation.* The strength of the pesticide industry is indicated by the quantity of pesticides applied to a state's crops for the year or years a bill was considered. This is indicated by the cost of the agricultural chemicals used, converted to constant 1995 dollars. Data was retrieved from the U.S. Agricultural Census.

At the same time, one might wonder whether or not environmental groups or free-speech interests influenced legislatures in states where bills failed. The role of interest groups in policy innovation also appears in state policy research (Crenson 1971; Daniels and Regens 1980; Reams 1990; Ringquist 1994; Minstrom and Vergari 1998). Environmental interest groups may lobby for favorable policies. Not surprisingly, states in which environmental groups are active, tend to have more

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[19]Consumers Union of United States, Inc. 1999. Do You Know What You're Eating?; available from http://www.igc.org/consunion/food/do_you_know2.htm.

[20]Press Release, American Council on Science and Health, January 30, 1998; available from http://www.acsh.org/press/releases/pesticide.html.

pro–environmental legislation (Ringquist 1994; Recchia 1999). Prior research indicates that national environmental groups such as the Sierra Club or the NRDC have the greatest influence on both state and national environmental policy (Dunlap and Mertig 1992). Research has also found that interest groups can affect defeat of proposed policy changes (Daniels and Regens 1980; Nice 1984; Minstrom 1997:764).

Environmental groups have contended that pesticide use is not only dangerous, but on the rise.[21] For example, the Environmental Working Group published a report in 1995, A Shopper's Guide to Pesticides in Produce, in which it stated that twelve popular fruits and vegetables have dangerously high levels of pesticide residues. Environmentalists have described pesticides as the "five worst environmental threats to children's health."[22] Environmental groups have also been threatened with agricultural product disparagement legislation, because they have been outspoken about irradiated fruits and vegetables (Lilliston and Cummins 1997). This is significant, since consumer organizations are the primary source for information about public safety (Opinion Research Corporation 01/00/90).

In a caustic retort to agribusiness lobbyists, the Sierra Club has dubbed agricultural product disparagement legislation in Missouri the "food Nazi act."[23]

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[21]Julie Vernan, "Is Baby Food Dangerous? Green Group Says Yes," 2000, Washington: Reuters; available from http://www.purefood.org/Toxic/babyFood.html; Environmental Working Group, Overexposed: Organophosphate Insecticides in Children's Food; available from http://www.ewg.org.

[22]"The Five Worse Threats to Children's Health," *Journal of Environmental Health* 60(9) (1998): 46.

[23]Opinion, *Kansas City Star*, 17 February 1998, 12.

Environmental groups have a history of watch dogging the pesticide industry, including working to oppose and repeal agricultural product disparagement legislation.[24] In California, for instance, the NRDC worked to defeat an agricultural product disparagement law in that state (Koennen 1996). In the 1980s, environmental groups, particularly the NRDC, actively sought cancellation of registration of Alar. This battle continued in the 1990s with efforts to ban other pesticides.

With the enactment of the Food Quality Protection Act in 1996, a new round of pesticide debate began as the U.S. Food and Drug Administration and Environmental Protection Agency oversee the evaluation of all known registered pesticides. Obviously, environmental activists will want to participate in the hearings and other processes designed to evaluate the safety of pesticides. The role of interest groups opposing agricultural product disparagement legislation is reflected in the following hypothesis. *Hypothesis 6: A state in which environmental public interest groups are not active is more likely to pass an agricultural product disparagement bill.* Data on the number of members of Sierra Club per state in the year a bill was considered was provided by the Sierra Club.

Free speech groups may also influence changes in policy. Proponents of agricultural product disparagement statutes have not been shy about the goal of passing the laws. Silencing critics of agricultural products is the primary goal. As stated by a spokesperson for the AFIA, "to the degree the mere presence of these

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[24]Brief Notes, *Food Chemical News*, May 4, 1998, 22.

laws has caused activists to think twice, then these laws have already accomplished what they set out to do" (Epstein 1997). Similar sentiment has been attributed to Texas State Representative Bob Turner: "The intent of the law was not to foster lawsuits, but to discourage people from giving out false information about perishable agricultural products" (Parks 1997). As expressed by Steve Appel, president of the Washington State Farm Bureau: "All too often, farm families face bankruptcy when farm products are disparaged while irresponsible activists simply shrug their shoulders and walk away having done the damage" (Appel 1998).

Indeed, members of the Sierra Club of Ohio have reported that because of agricultural product disparagement legislation, they are more cautious about what they say about genetically-modified foods (Heltzel 1997). The American Civil Liberties union (ACLU) and various press associations have gone on record as opposing agricultural product disparagement legislation (Semple 1995). The ACLU has publicly announced its efforts to reverse and halt the enactment of agricultural product disparagement regulation.[25] It also was a party to the lawsuit filed in Georgia in which plaintiffs sought a declaratory judgment that Georgia's agricultural product disparagement law was unconstitutional, and offered to assist the defense in the one agricultural product disparagement civil lawsuit heard in Ohio, *Agricultural General Co. v. Ohio Public Interest Research Group*.[26] Since the predominate

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[25]American Civil Liberties Union, Press Release, "ACLU Says 'Veggie Libel' Laws Are Patently Unconstitutional," 1 July 1999; available from http://www.aclu.org/news/n012298a.html.

[26]Nicoles Fox, "Bad-Mouthing Bananas," *American Journalism Review* 17(2) (March 1995): 12.

criticism of agricultural product disparagement statutes is that they abridge free speech, it is not surprising that the ACLU is actively opposing them.

Various incidences of muzzled speech about food safety have been reported: Actor Alec Baldwin believes that in 1999 the Discovery Channel balked at the prospect of a four-hour show about pesticides, herbicides, and cattle ranching practices. This has been denied by the channel.[27] In 1998, information about growth hormones in dairy cows was deleted from a manuscript written by research scientist J. Robert Hatherill.[28] During the same year the National Fisheries Institute warned that public activism designed to protect swordfish might subject protesters to a food disparagement lawsuit.[29] In 1998, a book about food safety was canceled after the Monsanto Company warned its publisher that it could be sued under agricultural product disparagement statutes.[30] The book was subsequently published by a different company, and Monsanto has not taken action against the authors.

Similarly, a small book publisher in Portland reported feeling threatened by a telephone call from a representative of the Pet Food Institute about a forthcoming book she was publishing about meat products.[31] In 1997, an environmental group,

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[27]Melody Petersen, "Farmers' Right to Sue Grows, Raising Debate on Food Safety," *New York Times*, 1 June 1999, A1.

[28]*Ibid.*

[29]Karen Uhlenhirth, "Missouri May Join Debate on Food Defamation," *Kansas City Star*, 22 January 1998, F1.

[30]*Ibid.*

[31]Ellen Emry Heltzel, "Publisher Has Her Own Mad-Cow Scare," *Portland Oregonian*, 12 October 1997, G07.

Food & Water, received a letter from a lawyer for the United Fresh Fruit and Vegetable Association. The letter stated that the group should cease distribution of reports about the safety of irradiating fruits and vegetables.[32]

In 1997, a small publisher was contacted by a representative of the pet food industry about a book it was going to publish. The caller indicated that inaccuracies in the book could become the subject of legal action. The book in question, *Food Pets Die For*, addressed the use of dead animals in pet food.[33] Local television reporters have also been threatened with agricultural product disparagement lawsuits.[34] On the other hand, at least one major study critical of pesticide residues on food apparently has not generated an agricultural product disparagement lawsuit.[35] Others have also expressed their lack of fear in speaking out about food safety.[36]

Whether free speech groups may influence votes for the defeat of an agricultural product disparagement bill is tested with the following hypothesis: *Hypothesis 7: A state in which free speech public interest groups are weak is more likely to enact agricultural product disparagement legislation.* Since the ACLU refused a written request for membership data, free-speech interests can be

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[32]Ben Lilliston and Ronnie Cummins, "Food Slander Laws in the US: The Criminalization of Dissent," *The Ecologist* 27(6) (November 21, 1997): 30-40.

[33]Ellen Emry Heltzel, "Writing in the Rain," *Portland Oregonian*, 12 October 1997, 17.

[34]Nichols Fox, "Bad-Mouthing Bananas."

[35]George Antham, "New Study Stirs Up More Controversy Over Food Safety," *Des Moines Register*, 8 February 1998, 9; Bruce Ingersoll, "Study Warns on Pesticide Levels in Food," *Wall Street Journal*, 30 January 1998, A16.

[36]Nichols Fox, "Bad-Mouthing Bananas."

measured by the number of lawsuits in which the ACLU was a litigant ten years prior to the year in which an agricultural product disparagement bill was debated in a given state. This information was obtained through a Westlaw database search.

Summary

This chapter presented the variables and hypotheses that will be subject to statistical analysis in Chapter Four. Those variables are: partisanship, ideology, support for the environment, farming interest, pesticide interest, free-speech interest, and environmental group interest. There are seven hypotheses about the influences on agricultural product bill passage. It is expected that in states with Republican-controlled legislatures and conservative citizens, a strong presence of agricultural businesses and lack of environmental commitment, it is more likely that an agricultural product disparagement bill will pass into law. States that have strong environmental interest groups and free speech interests should be less likely to pass agricultural product disparagement legislation. In Chapter Four, these hypotheses will be empirically tested using the data identified in this chapter.

Chapter 4

STATISTICAL ANALYSIS of INFLUENCES on AGRICULTURAL PRODUCT DISPARAGEMENT BILL PASSAGE

Introduction

This chapter is divided into three sections. In the first section are the descriptive statistics. This is followed by results of the bivariate analysis. Lastly, the results of the multivariate analysis are provided.

Descriptive Statistics

Descriptive statistics were run for all independent variables. Table 13 presents the results of that analysis for the independent variables, party control, ideology, environmental support, environmental interest, farming interest, pesticide interest, and free speech interest.

TABLE 13:

DESCRIPTIVE STATISTICS OF INDEPENDENT VARIABLES

Variable	Minimum	Maximum	Mean
Party Control	0.00	1.00	.29
Ideology	21.2	46.9	31.58
Environmental Support	.12	6.68	1.18
Environmental Interest	.03	.60	.20
Farming Interest	.05	7.52	1.16
Pesticide Interest	.01	3.28	.40
Free-Speech Interest	0.00	2.00	.24

The first independent variable to discuss in descriptive terms is party control. Party control is a binary variable: either Republicans controlled state government, or they did not, as indicated in Table 14. That is, either there was a Republican governor and Republican-controlled legislature, or there was not. Accordingly, the range represents only two different data points: 0 for non-Republican control, and 1 for Republican control. The descriptive statistic for the median is not meaningful. Of the 58 data points, 16 were controlled by the Republican Party, as indicated in Table 14. Thus, about 29% of the time, Republicans controlled state government.

Five of the thirteen enacting states were controlled by the Republican Party: Arizona, Colorado, North Dakota, Ohio, and South Dakota. Thus, the majority of enacting states were controlled by the Democratic Party or were split along party lines. The enacting states that were not controlled by the Republican Party are: Alabama, Florida, Georgia, Oklahoma, Idaho, Louisiana, Mississippi, and Texas. Twelve states which were Republican-controlled did not pass agricultural product disparagement legislation. These include: California, Illinois, Kansas, Iowa, Kentucky, Michigan, Montana, New Jersey, Pennsylvania, Utah, Wisconsin, and Wyoming. Thus, of the 35 states that have considered agricultural product disparagement legislation, only about 15% were Republican-controlled and passed a bill; in contrast, about one-third were Republican-controlled, but failed to enact a new law. Based on these descriptive statistics, one can begin to wonder whether partisanship will prove statistically significant when tested using more sophisticated techniques. At least at first blush based on descriptive statistics, it does not appear

that Republicans were necessarily influential in the passage of agricultural product disparagement laws.

TABLE 14:

PARTY CONTROL OF STATE GOVERNMENT

State	Year	Control	Code	State	Year	Control	Code
Alabama	***1993***	***No***	***0***	Nebraska[1]	1997	NA	0
Alaska	1995	No	0		1995	NA	0
Arizona	***1995***	***Yes***	***1***	Nevada	1995	No	0
Arkansas	1999	No	0	New Hampshire	1997	No	0
California	1997	No	0	New Jersey	1995	Yes	1
	1995	Yes	1	New Mexico	1995	No	0
Colorado	***1995***	***Yes***	***1***	New York	1995	No	0
Connecticut	1995	No	0	North Carolina	1995	No	0
Delaware	1991	No	0	***North Dakota***	***1997***	***Yes***	***1***
Florida	***1995***	***No***	***0***		1995	Yes	1
Georgia	***1993***	***No***	***0***	***Ohio***	***1996***	***Yes***	***1***
Hawaii	1995	No	0	***Oklahoma***	***1995***	***No***	***0***
Idaho	***1992***	***No***	***0***	Oregon	1995	No	0
Illinois	1995	Yes	1	Pennsylvania	1995	Yes	1
Indiana	1995	No	0	Rhode Island	1995	No	0
Iowa	1996	Yes	1	South Carolina	1995	No	0
Kansas	1995	Yes	1		1994	No	0
Kentucky	1995	No	0	***South Dakota***	***1994***	***Yes***	***1***
Louisiana	***1991***	***No***	***0***	Tennessee	1995	No	0
Maine	1995	No	0	***Texas***	***1995***	***No***	***0***
Maryland	1998	No	0	Utah	1995	Yes	1
	1996	No	0	Vermont	1999	No	0
Massachusetts	1997	No	0		1997	No	0
Michigan	1998	No	0		1996	No	0

[1]Representatives are in a unicameral body without party designation. Washington, DC: US Statistical Abstract, 1996, 284.

	1994	Yes	1	Virginia	1995	No	0
Minnesota	1994	No	0	Washington	1995	No	0
Mississippi	***1994***	***No***	***0***	West Virginia	1995	No	0
Missouri	1994	No	0	Wisconsin	1995	Yes	1
Montana	1995	Yes	1	Wyoming	1995	Yes	1

Source: Book of the States, various years; US Statistical Abstract, various years. Enacting states are indicated in bold.

The next independent variable to consider descriptively is ideology. Ideology was measured by citizens' responses to surveys. The variable ideology ranged from a low score (less conservative) of 21.2 (Nevada) to a high (more conservative) of 46.9 (Idaho), as shown in Table 15. All but two of the enacting states are above the mean ideology of 31.8. This means that in a majority of the enacting states, the citizenry is generally conservative. The enacting conservative states are: Alabama, Arizona, Florida, Georgia, North Dakota, Oklahoma, Idaho, Louisiana, Mississippi, South Dakota, and Texas. Only Colorado and Ohio are ranked slightly less conservative than the mean at 31.4 and 30.2, respectively. Obviously, even in the case of Colorado and Ohio, these states are still fairly middle-of-the-road in terms of conservatism. Also, four of the enacting states are very conservative, including Idaho, which is considered the most conservative at 46.9.

Still, many conservative states have failed to pass an agricultural product disparagement law. Wyoming, Pennsylvania, and South Carolina are all very conservative and have had agricultural product disparagement legislation introduced in their respective state legislatures, but without success. So while a state might be conservative and still not pass agricultural product disparagement legislation, one can preliminarily conclude that a liberal state does not seem able to pass the same type of legislation. Typical of this phenomenon is Vermont. That state has experienced more serious attempts at passage of a bill than any other. Of the three times a bill has gone through committee and to a vote in the legislature, it has been defeated. One explanation for this may be Vermont's low conservatism score, near the most liberal at 28.8. Whether ideology plays a significant role in bill passage

will, of course, be subject to further statistical testing using multivariate analysis.

TABLE 15:

STATE IDEOLOGY RANKINGS

Nevada	21.2	Arkansas	32.6
Massachusetts	27.5	Tennessee	32.6
Washington	27.7	Nebraska	32.7
Connecticut	28.1	Delaware	32.8
New Jersey	28.8	Minnesota	32.9
Vermont	28.8	North Carolina	33.7
California	29.2	Virginia	33.8
Rhode Island	29.2	Indiana	33.9
West Virginia	29.2	***Florida***	***34.1***
New Hampshire	29.5	***Louisiana***	***34.1***
Michigan	29.6	Oregon	34.2
Kansas	29.7	Maine	35.1
Iowa	29.8	Montana	35.3
Ohio	***30.2***	***Arizona***	***35.5***
New York	30.4	***Alabama***	***36.1***
Kentucky	30.5	New Mexico	36.3
Missouri	30.6	***Texas***	***36.8***
Illinois	30.9	***South Dakota***	***37.1***
Wisconsin	31.1	Utah	38.0
Maryland	31.3	South Carolina	38.5
Colorado	***31.4***	***Mississippi***	***38.2***
Georgia	***31.8***	***Oklahoma***	***39.0***
Wyoming	32.0	***North Dakota***	***40.8***
Pennsylvania	32.4	***Idaho***	***46.9***

Source: Erikson et al. 1993. Enacting states are indicated in bold.

Another independent variable is the degree to which a state has demonstrated its commitment to a healthy environment. Support for the environment was measured using state expenditures during the year a bill was being debated. Support for the environment varies widely across states, as indicated in Table 16. As a percentage of the state budget, states spend between a low of .12% in Ohio to a high of 6.68% in Washington. Contrary to what one might expect, some enacting states have been large spenders on the environment as in Colorado (4.65%) or Idaho (3.98%), and more moderate spenders as is the case with Louisiana (2.16%), Florida (1.61%), Texas (.99%), and South Dakota (.84%). However, about half, or seven, of the enacting states, Mississippi (.64%), Arizona (.63%), North Dakota (.56%), Oklahoma (.46%), Alabama (.34%), Georgia (.28%), and Georgia (.28%), are below the mean spending level of 1.19%. Thus, there seems to be a moderate trend that enacting states are not very committed to environmental protection. One should also keep in mind that the two states that are high spenders also house two large federal facilities undergoing remediation, namely Rocky Flats in Colorado and Idaho National Environmental Laboratory in Idaho. State efforts at these sites may disproportionately skew the picture of environmental commitment in Colorado and Idaho.

Moreover, there is a significant number of states that have declined to pass legislation that do not have spending levels indicative of a commitment to the environment. Such states include: Alaska, Arkansas, California, Connecticut, Hawaii, Illinois, Indiana, Iowa, Kansas, Kentucky, Maryland, Massachusetts, Michigan, Minnesota, Nebraska, Nevada, New Hampshire, New Jersey, New

Mexico, New York, North Carolina, Oregon, South Carolina, Virginia, Missouri, Wisconsin, and Wyoming. Thus a majority of states, or 34, spend below the average on the environment. Of the 34, 27 have failed to pass agricultural product disparagement legislation. This suggests that the hypothesis that states committed to the environment are less likely to pass agricultural product disparagement legislation may not prove accurate when subject to multivariate analysis.

TABLE 16:

STATE COMMITMENT TO ENVIRONMENTAL QUALITY AS PERCENTAGE OF STATE BUDGET

Alabama	***1993***	***.34***	Nebraska	1997	.42
Alaska	1995	.95	Nebraska	1995	1.16
Arizona	***1995***	***.63***	Nevada	1995	.53
Arkansas	1999	.27	New Hampshire	1997	.40
California	1997	.71	New Jersey	1995	.85
California	1995	.71	New Mexico	1995	.83
Colorado	***1995***	***4.65***	New York	1995	.44
Connecticut	1995	.82	North Carolina	1995	.44
Delaware	1991	1.97	***North Dakota***	***1997***	***.56***
Florida	***1995***	***1.61***	North Dakota	1995	.52
Georgia	***1993***	***.28***	***Ohio***	***1996***	***.12***
Hawaii	1995	.25	***Oklahoma***	***1995***	***.46***
Idaho	***1992***	***3.98***	Oregon	1995	1.18
Illinois	1995	.67	Pennsylvania	1995	1.89
Indiana	1995	.53	Rhode Island	1995	1.47
Iowa	1996	.71	South Carolina	1995	.75
Kansas	1995	.53	South Carolina	1994	.76
Kentucky	1995	.45	***South Dakota***	***1994***	***.84***
Louisiana	***1991***	***2.16***	Tennessee	1995	1.82
Maine	1995	1.28	***Texas***	***1995***	***.99***
Maryland	1998	.42	Utah	1995	1.28
Maryland	1996	.42	Vermont	1999	2.81
Massachusetts	1997	.43	Vermont	1997	2.81
Michigan	1998	.70	Vermont	1996	2.72
Michigan	1994	1.08	Virginia	1995	1.07
Minnesota	1994	.67	Washington	1995	6.68

Mississippi	***1994***	***.64***	West Virginia	1995	4.01
Missouri	1994	.29	Wisconsin	1995	.49
Montana	1995	1.29	Wyoming	1995	.44

Source: Book of the States, various years. Enacting states are indicated in bold.

In short, about half of the enacting states have high levels of environmental commitment while the other half have below average levels of spending on the environment. Thus, state support for the environment at the descriptive level can not provide much insight into its role, if any, in bill passage. Another independent variable, environmental interest groups, can also be discussed in descriptive terms. Similar to environmental support, the presence of environmental interest groups varies widely across the states, as indicated in Table 17. On the average, about .20% of a state's population could be characterized as environmental activists. Generally, enacting states have a relatively low rate of environmental activism. One of the enacting states, Mississippi, ranks last in terms of environmental activism, at .03% of the state's population, as indicated in Table 17. Not far behind Mississippi are other enacting states such as Louisiana (.06%), Alabama (.06%), South Dakota (.04%), North Dakota (.04%), and Georgia (.09%). Only two states have environmental activist levels above the mean. Colorado has .39% members in the state population and Arizona has .20% members in the state population.

Certainly, many states have high levels of environmental activism and have not been able to pass an agricultural product disparagement statute. Some of these states are California (.48%), Connecticut (.26%), Hawaii (.56%), Oregon (.43%), Vermont (.60%), and Washington (.46%). This suggests that the presence of environmental activists may have a negative effect on bill passage. However, there are not an insignificant number of non-enacting states who also have relatively low levels of environmental activism. These states are: Arkansas, Delaware, Illinois, Indiana, Iowa, Kentucky, Missouri, Nebraska, New York, Pennsylvania, South

Carolina, Tennessee, Virginia, West Virginia, Wisconsin, and Wyoming. Thus, it will be interesting to see if environmental activism proves to be a significant influence on bill passage using a multivariate analysis.

TABLE 17:

ENVIRONMENTAL INTEREST GROUP PRESENCE

Alabama	***1993***	***.06***
Alaska	1995	.23
Arizona	***1995***	***.20***
Arkansas	1995	.05
California	1997	.47
California	1995	.48
Colorado	***1995***	***.39***
Connecticut	1995	.26
Delaware	1991	.16
Florida	***1995***	***.15***
Georgia	***1993***	***.09***
Hawaii	1995	.56
Idaho	***1992***	***.13***
Illinois	1995	.18
Indiana	1995	.10
Iowa	1996	.11
Kansas	1995	.11
Kentucky	1995	.07
Louisiana	***1991***	***.06***
Maine	1995	.20
Maryland	1998	.21
Maryland	1996	.22
Mississippi	***1994***	***.03***
Missouri	1994	.13
Montana	1995	.21
Nebraska	1997	.07
Nebraska	1995	.08

Table 17--*Continued*

Nevada	1995	.22
New Hampshire	1997	.22
New Jersey	1995	.21
New Mexico	1995	.31
New York	1995	.17
North Carolina	1995	.17
North Dakota	1995	.05
North Dakota	***1997***	***.05***
Ohio	***1996***	***.13***
Oklahoma	***1995***	***.06***
Oregon	1995	.43
Pennsylvania	1995	.16
Rhode Island	1995	.25
South Carolina	1994	.07
South Carolina	1995	.09
South Dakota	***1994***	***.04***
Tennessee	1995	.10
Texas	***1995***	***.11***
Utah	1995	.25
Vermont	1999	.60
Vermont	1997	.60
Vermont	1996	.60
Virginia	1995	.17
Washington	1995	.46
West Virginia	1995	.06
Wisconsin	1995	.19
Wyoming	1995	.14

Source: The Sierra Club.
Enacting states are indicated in bold.

In addition to the interest group environmental activists, other interest groups had a stake in agricultural product disparagement legislation. The presence of agricultural political power also varies among the states, as indicated in Table 18. As a percentage of the Gross State Product (GSP), farming may be a rather insignificant factor in the economy as is the case in states such as Alaska (.05%) or Massachusetts (.07%). State dependency on agriculture varies, however, ranging from a low of .05% in Alaska to a high of 7.52% in South Dakota. Many, although not all of the enacting states, include farming among their more significant economic sectors. These states are: Alabama (1.32%), Colorado (4.11%), Georgia (.90%), Idaho (4.62%), Mississippi (1.46%), North Dakota (6.04%), and South Dakota (7.52%). Thus, a slim majority of enacting states economically depend on farming.

Enacting states that have relatively lower percentages of their economy dependent on agriculture are: Arizona (.69%), Florida (.50%), Louisiana (.59%), Ohio (.44%), Oklahoma (.72%), and Texas (.47%). At the same time, none of the enacting states are among the states in which farming is relatively insignificant to the state economy, such as Alaska (.05%), Connecticut (.14%), Illinois (.13%), Massachusetts (.07%), Michigan (.12%), Nevada (.08%), New Hampshire (.13%), New Jersey (.09%), New York (.06%), and West Virginia (.10%). Moreover, a few states that have declined to pass an agricultural product disparagement bill include agriculture as a significant part of their economy. These states include Iowa (5.22%), and Nebraska (6.54%). Even California, considered by some to be the quintessential farming state with one in ten jobs directly related to farming, has

failed to pass a bill.[2] Since there is not a clear trend in the political power of farmers in enacting states, one may suspect that agricultural interests may not prove a statistically-significant influence, despite qualitative research claims to the contrary.

[2]"'Veggie Libel' Reconsidered in California," *Los Angeles Times*, 22 August 1997, 15.

TABLE 18:

AGRICULTURAL INTEREST

Alabama	***1993***	***1.32***	Nebraska	1997	6.54
Alaska	1995	.05	Nebraska	1995	3.57
Arizona	***1995***	***.69***	Nevada	1995	.08
Arkansas	1999	.38	New Hampshire	1997	.13
California	1997	.59	New Jersey	1995	.09
California	1997	.48	New Mexico	1995	.62
Colorado	***1995***	***4.11***	New York	1995	.06
Connecticut	1995	.14	North Carolina	1995	1.50
Delaware	1991	.83	***North Dakota***	***1997***	***6.04***
Florida	***1995***	***.50***	North Dakota	1995	2.65
Georgia	***1993***	***.90***	***Ohio***	***1996***	***.44***
Hawaii	1995	.06	***Oklahoma***	***1995***	***.72***
Idaho	***1992***	***4.62***	Oregon	1995	.47
Illinois	1995	.13	Pennsylvania	1995	.17
Indiana	1995	.20	Rhode Island	1995	.17
Iowa	1996	5.22	South Carolina	1995	.46
Kansas	1995	1.39	South Carolina	1994	.56
Kentucky	1995	1.05	***South Dakota***	***1994***	***7.52***
Louisiana	***1991***	***.59***	Tennessee	1995	.34
Maine	1995	.29	***Texas***	***1995***	***.47***
Maryland	1998	.26	Utah	1995	.39
Maryland	1996	.26	Vermont	1999	.87
Massachusetts	1997	.07	Vermont	1997	.87
Michigan	1998	.12	Vermont	1996	.87
Michigan	1994	.08	Virginia	1995	.28
Minnesota	1994	1.13	Washington	1995	.61
Mississippi	***1994***	***1.46***	West Virginia	1995	.10

Missouri	1994	.75	Wisconsin	1995	.21
Montana	1995	2.18	Wyoming	1995	.56

Source: U.S. Bureau of the Census. Enacting states are indicated in bold.

Another agricultural business variable is the pesticide industry. The political influence of pesticide manufacturers has been indicated by the amount of pesticides used in a given state, as indicated in Table 19. Pesticide usage varies widely among the states. As a percentage of the Gross State Product (GSP), some states use very little chemical controls, such as Connecticut at .01%, while others are relatively heavy users, such as Iowa at 1.32%. The lowest usage is .01%; the highest usage is 3.28%. Only four of the enacting states applied more pesticides than the average of .40%. Those states are Idaho (1.37%), Mississippi (.74%), North Dakota (3.20%), and South Dakota (1.52%). The remaining nine enacting states used less than the average amount of pesticides. Some of the enacting states are relatively low users of agricultural chemicals, such as Arizona (.13%0, Colorado (.14%), and Texas (.14%). And, interestingly, many relatively heavy pesticide users did not enact an agricultural product disparagement statute. These states include: Arkansas (.80%), Indiana (.45%), Iowa (1.32%), Kansas (.69%), Minnesota (.57%), Montana (.79%), and Nebraska (1.51%). This suggests that the pesticide industry may not have directly or significantly affected bill passage. This will be tested further using multivariate analysis.

TABLE 19:

PESTICIDE INTEREST

Alabama	***1993***	***.21***	Nebraska	1997	1.51
Alaska	1995	.21	Nebraska	1995	1.24
Arizona	***1995***	***.13***	Nevada	1995	.02
Arkansas	1999	.80	New Hampshire	1997	.01
California	1997	.18	New Jersey	1995	.02
California	1995	.14	New Mexico	1995	.11
Colorado	***1995***	***.14***	New York	1995	.03
Connecticut	1995	.01	North Carolina	1995	.20
Delaware	1991	.13	***North Dakota***	***1997***	***3.28***
Florida	***1995***	***.18***	North Dakota	1995	2.42
Georgia	***1993***	***.20***	***Ohio***	***1996***	***.16***
Hawaii	1995	.14	***Oklahoma***	***1995***	***.29***
Idaho	***1992***	***1.37***	Oregon	1995	.28
Illinois	1995	.31	Pennsylvania	1995	.06
Indiana	1995	.45	Rhode Island	1995	.01
Iowa	1996	1.32	South Carolina	1995	.17
Kansas	1995	.69	South Carolina	1994	.17
Kentucky	1995	.27	***South Dakota***	***1994***	***1.32***
Louisiana	***1991***	***.21***	Tennessee	1995	.17
Maine	1995	.12	***Texas***	***1995***	***.14***
Maryland	1998	.07	Utah	1995	.06
Maryland	1996	.07	Vermont	1999	.09
Massachusetts	1997	.01	Vermont	1997	.09
Michigan	1998	.16	Vermont	1996	.10
Michigan	1994	.15	Virginia	1995	.09
Minnesota	1994	.57	Washington	1995	.24
Mississippi	***1994***	***.74***	West Virginia	1995	.05

Missouri	**1994**	**.37**	**Wisconsin**	**1995**	**.29**
Montana	**1995**	**.79**	**Wyoming**	**1995**	**.19**

Source: US Census of Agriculture, various years. Enacting states are indicated in bold.

Another independent variable is free-speech activism. Free-speech activism reveals that about twenty percent of the states had active groups, as indicated in Table 20. These states include: Alabama, Florida, Georgia, Maryland, Michigan, Missouri, New York, Virginia, and Washington. Just three of the states with active free-speech groups, Alabama, Florida, and Georgia, have enacted agricultural product disparagement legislation. Thus, most states that enacted agricultural product disparagement legislation, did not have active free-speech groups. In contrast, if a state had active free-speech groups, it appears that agricultural product disparagement legislation may have had a difficult road to passage. This suggests that in the absence of free-speech activism, it is easier for a state legislature to enact agricultural product disparagement legislation. Since a number of states have active free speech groups, but failed to pass an agricultural product disparagement bill, again multivariate testing will further elucidate the effect of this variable.

TABLE 20:

FREE SPEECH ACTIVISM

State	Lawsuits	State	Lawsuits
Alabama	***1***	Nebraska	0
Alaska	0	Nebraska	0
Arizona	***0***	Nevada	0
Arkansas	0	New Hampshire	0
California	0	New Jersey	0
California	0	New Mexico	0
Colorado	***0***	New York	2
Connecticut	0	North Carolina	0
Delaware	0	***North Dakota***	***0***
Florida	***1***	North Dakota	0
Georgia	***1***	***Ohio***	***0***
Hawaii	0	***Oklahoma***	***0***
Idaho	***0***	Oregon	0
Illinois	0	Pennsylvania	0
Indiana	0	Rhode Island	0
Iowa	0	South Carolina	0
Kansas	0	South Carolina	0
Kentucky	0	***South Dakota***	***0***
Louisiana	***0***	Tennessee	0
Maine	0	***Texas***	***0***
Maryland	1	Utah	0
Maryland	1	Vermont	0
Massachusetts	0	Vermont	0
Michigan	2	Vermont	0
Michigan	2	Virginia	1
Minnesota	0	Washington	1

Mississippi	***0***	West Virginia	0
Missouri	1	Wisconsin	0
Montana	0	Wyoming	

Source: Westlaw. Enacting states are indicated in bold.

Bivariate Analysis

Table 21 presents the results of bivariate correlations. The correlations were run in order to consider preliminary relationships among variables, particularly to spot any potential multicolinearity problems (Strickland and Whicker 1992; Alm 1993). The correlations also allow for preliminary conclusions about the association between the dependent variable, bill outcome, and the independent variables, partisanship, ideology, support for the environment, pesticide interest, environmental interest, free-speech interest, and farming interest.

TABLE 21:

CORRELATIONS

	Bill pass.	Parti-sanship	Ideo.	Envir. supp.	Pest. int.	Envir. int.	Free-speech int.	Farm int.
Bill pass.	1.000							
Parti-sanship	.108	1.00						
Ideo.	.350**	.134	1.00					
Envir. supp.	.068	-.085	.049	1.00				
Pest. int.	.223	.300*	.340**	-.091	1.00			
Envir. Int.	-.300*	-.101	-.427**	.373**	-.358**	1.00		
Free-speech int.	-.011	-.149	-.028	-.024	-.184	-.112	1.00	
Farming int.	.347**	.281*	.320*	.091	.777**	-.236	-.204	1.00

** Correlation is significant at the .01 level (2-tailed).
* Correlation is significant at the .05 level (2-tailed).

Generally, the variables do not show a significant rate of colinearity. Of the statistically significant pairs, only farming interests and pesticide interests raise a concern about multicolinearity. The concern would be that the two measures are either masking an underlying variable, or are measuring the same phenomenon. In point of fact, where there are pesticides, there are farmers. It would be difficult to use any measure of both variables that did not possibly capture the same phenomenon. That is, the same problem would arise if the strength of the pesticide industry were measured by pounds of pesticide applied per acre or per state, or the value of the pesticide industry to the state economy. All of these measures could be surrogates for the data used in this research, albeit perhaps not as accurate as the data used in this study. Since qualitative and theoretical literature makes a strong case for the influence of both farmers and the pesticide industry, these two variables will remain in the multivariate analysis with the caveat that multicolinearity should be considered in drawing conclusions about the results.

The correlations also allow for some preliminary observations about the associations between the dependent variable and the independent variables. The independent variables that prove statistically significant are: ideology, environmental interest group pressure, and farming interest pressure. Thus, there is a statistically-significant association between bill passage and ideology, between bill passage and environmental interest group pressure, and between bill passage and farming interest pressure. All of the variables are in the expected direction. Ideology, or conservatism, and farming interest appear to exert a positive pressure on bill passage. Environmental groups seem to adversely affect bill passage.

The correlations fail to show other possible associations, such as between bill passage and partisanship, bill passage and support for the environment, bill passage and pesticide industry pressure, and bill passage and free-speech group pressure. To further explore the relationships between the dependent variable and independent variables, a mutivariate analysis will be performed. By completing this part of the research, one should be able to draw conclusions about the validity of the original hypotheses.

Multivariate Analysis

Logit and probit are the preferred statistical methods for analyzing dichotomous variables, such as whether or not a state passed a bill into law (Mooney and Lee 1995; Palmer and Vogel 1995; Hero and Tolbert 1996; Fleischmann and Stein 1998; Burden and Lacy 1999). Logit and probit are designed to test the influences on dichotomous dependent variables (Burden and Lacy 1999). Generally, one uses logit when the underlying phenomenon is a qualitative variable whereas probit is used when the underlying variable is quantitative in nature (Liao 1994).

Binary dependent variables present unique challenges to statistical analysis (Liao 1994). Because the dependent variable is dichotomous, the distribution of residual error is heteroscedastic; this violates one of the assumptions of regression analysis (Aldrich and Nelson 1988). Heteroscedasticity means that there is a lack of homogeneity of variances. Without homogeneity of variance, the results of a linear regression may not be valid (Aldrich and Nelson 1988). Similarly, errors can

arise when applying ordinary least squares (OLS) estimates to a binary dependent variable. Since the dichotomous variable is not normally distributed, OLS estimates of the sum of squares are misleading; accordingly, significance tests and the standard error of regression, if used, would be inaccurate (Liao 1994).

In contrast to OLS, maximum likelihood estimation (MLE) is used to calculate logit coefficients (DeMaris 1992). MLE is better suited to small numbers of cases than OLS (Aldrich & Nelson 1988). While OLS tries to minimize the sum of squared distances of the data points to the regression line, MLE attempts to maximize the log likelihood. This provides an indication of the odds that the observed values of the dependent variable can be predicted from the observed values of the independent variables (Aldrich and Nelson 1988).

Logistic regression allows for the logistic transformation of p; this is known as taking the logit of p. This is significant because p (as we know it in linear regression) is limited in range from 0 to 1. Logit (p), however, ranges from negative infinity to positive infinity (DeMaris 1992). Logistic regression estimates of the change in the log odds that would result from a one-unit change in the specific explanatory variable when all other explanatory variables remain fixed. The estimates reveal the direction of the relationship, and whether it is likely to increase or decrease the probability of an event occurring (Aldrich and Nelson 1988). Independent logit coefficients do not measure a linear relationship, but a curvilinear one, and are interpreted for their sign (Brooks 1999).

Here, the logit equation is as follows:

$$ADVote = b_1Par + b_2Ide + b_3Sup + b_4Far + b_5Pes + b_6Spe + b_7Env$$

where

ADVote = vote in favor or opposition to an agricultural disparagement bill (1 if supported; 0 if opposed)

Par = Majority party in legislature;

Ide = Ideology of constituents in state;

Sup = Support for environmental values in a state;

Far = The power of farmers in a state;

Pes = The power of the pesticide industry in a state;

Spe = The presence of free=speech interest groups in a state;

Env = The presence of environmental activist groups in a state.

The results of the logit regression performed in this research are reported in Table 22.

TABLE 22:

THE DETERMINANTS OF BILL PASSAGE

Partisanship	1.55	(6.16)
Ideology	.47	(.17)***
Environmental Support	.58	(.50)
Farming Interest	.96	(.46)**
Pesticide Interest	-2.95	(1.36)**
Free-Speech Interest	1.06	(.86)
Environmental Interest	-14.24	(.08)*
-2 X Log Likelihood	36.01	
Pseudo R^2	.55	
N	58	
Correctly predicted percentage	81	

Note: Cell entries are unstandardized logit coefficients; Standard errors are in parentheses. ***p≤.01; **p≤.05; *p≤.10. Analysis conducted using SPSS 7.0.

There were 58 data points, each indicating an occurrence of an agricultural disparagement bill getting at least through both houses of the legislature. This data was then coded 1 for adopting and 0 for not adopting the legislation. In interpreting logistic regression results, the first step is to discuss the overall goodness of fit of the model. Overall, the model performs quite well; the pseudo R^2 is .55. The log likelihood test is used to test the null hypothesis that all the slope coefficients are zero (Greene 1993, 647). Since the log likelihood statistic is considerably larger than its corresponding critical value, the null hypothesis may be rejected. Moreover, the model predicts 81%, or 45 cases correctly.

The first numerical column in Table 22 represents the odds of having an event occur versus not occur, per unit change in an explanatory variable, all else being equal. As predicted, ideology influences whether an agricultural disparagement bill gets passed. That is, in states with a conservative citizenry, there is a greater likelihood that a bill will pass than in less conservative states. This finding adds to a fairly rich body of state empirical studies that report a positive association between ideology and policy change. It also adds to the literature by providing a unique environmental issue in which ideology affected outcome. As indicated in Chapter One, the sub-set group of literature that deals with state environmental policymaking is greatly in need of additional research.

Prior empirical research that has used ideology as a variable includes the hypothesis that predicts that a liberal citizenry or legislature will pass pro-environmental regulations.(Chapter One) Here, the opposite question is posed: Do conservative states pass anti-environmental legislation? Thus, the finding here

adds to the existing body of literature by demonstrating that ideology may be significant in the case of conservative states enacting conservative policies. The finding also confirms prior theoretical work. As discussed in Chapter One, theorists have long posited that legislators will vote based on the political leanings of their constituents (Schwaz, Fenmore, and Volgy 1980; Page et al. 1984; Almond and Verba 1989). This is not surprising given legislators desire for re-election. At the same time, this finding runs counter to the public choice literature. Public choice theorists reject the notion that ideology plays a significant role in the policy process.

Another plausible explanation for this finding is that liberal states do not provide a climate in which anti-environmental legislation can prosper. There may be fear of reprisal from activists, not just in the form of voting, but in other means of public participation, such as protest, and public debate. Liberal states may also have other policy priorities that consume the time and attention of legislators to the exclusion of more conservative, pro-business matters.

Table 23 provides a summary of the hypotheses and an indication as to whether they were supported by the multivariate analysis. The second hypothesis, that a state is more likely to pass an agricultural product disparagement bill if the citizenry of that state is politically conservative, is supported by the logit analysis.

TABLE 23:

IMPLICATIONS OF FINDINGS FOR HYPOTHESES

1. A state is more likely to pass an agricultural product disparagement bill if there is Republican Party unity in the house, senate, and governor's office. (NOT SUPPORTED)
2. A state is more likely to pass an agricultural product disparagement bill if the citizenry of that state is politically conservative. (SUPPORTED)
3. A state with weak commitment to the environment is more likely to pass agricultural product disparagement legislation. (NOT SUPPORTED)
4. A state in which farming interests are strong is more likely to pass an agricultural product disparagement bill. (SUPPORTED)
5. A state in which the presence of the pesticide industry is strong is more likely to pass agricultural product disparagement legislation. (NOT SUPPORTED)
6. A state in which environmental public interest groups are not active, is more likely to pass an agricultural product disparagement bill. (SUPPORTED)
7. A state in which free speech public interest groups are weak is more likely to enact agricultural product disparagement legislation. (NOT SUPPORTED)

In contrast to ideology, partisanship or party control, does not prove a significant influence on bill passage. Thus, the first hypothesis, that a state is more likely to pass an agricultural product disparagement bill if the Republican Party controls both the legislature and the governor's seat, is not supported by the outcome of the logit analysis. This was not expected given the theories and prior literature that provided the basis for the first hypothesis. It is also surprising because ideology proved statistically significant.

One might think that conservatives and Republicans, and liberals and Democrats, go hand-in-hand. The findings here question that assumption. One may also assume that pro-business legislation such as an agricultural product disparagement statute would be pushed through by Republicans, as supported by theoretical work (McCloskey 1971). Again, this study is not congruent with that body of theoretical literature. However, this finding does confirm other research with similar results, and of course contrasts with other empirical studies that report a relationship between party control and policy innovation (Berry and Berry 1990; Hwang and Gray 1991:292; Brown 1995; Minstrom and Vergari 1998).

Perhaps this difference in ideology and party control results could be explained by regional differences (Key 1949). That is, Southern Democrats may be more conservative and "Republican-like" than Democrats from other regions of the country. While this phenomenon may not be as true today as it has been earlier in the twentieth century, one may still find examples of its existence. For instance, Sen. John Breaux of Louisiana recently went against the vast majority of his Democratic colleagues in voting to affirm President George W. Bush's candidate for

Attorney General, John Ashcroft. Six of the states that have enacted agricultural product disparagement legislation are in the South (Alabama, Florida, Georgia, Louisiana, Mississippi, and Texas). In the South, Democrats may think more like Republicans elsewhere. In the Northeast, there is the opposite tendency (Brown 1995; Jennings 1979; Paddock 1992). There, Republicans are considered more liberal than one would see in other parts of the country. Moreover, Southern legislatures have generally been found less pro-environmental than others, regardless of party affiliation (Bacot and Dawes 1996; Kenski and Kenski 1981).

In addition, both interest group dominance and the political culture of Southern and Western states suggests that they would be more amenable to agricultural product disparagement legislation. Of the thirteen enacting states, seven are in the South, three are in the West, three are in the Midwest, and none are in the Northeast. As discussed by Thomas and Hrebenar (1994), many of these Southern and Western states are dominated by interest groups and also "tend to have traditionalistic and individualistic political cultures, cultures that are considered more amenable to interest group dominance" (Hedge: 69). Thomas and Hrebenar also suggest that regional patterns of policymaking may be a consequence of the lack of economic diversity in the South and West, and lack of party competition in the South. Finally, the lack of party competition generally associated with the Southern states may at least partially account for the predominance of Southern states passing agricultural disparagement legislation (Gray 2001).

The finding here may also be an example of a tension in the theory about party politics. On one hand, if Republicans tend to be more pro-business

(Schattschneider 1960; Rossiter 1960; McCloskey 1971), then one would think they would also favor agricultural product disparagement legislation. On the other hand, since Republicans are not thought to favor big government and opposed to government intervention in societal problems, they could also be opposed to agricultural product disparagement legislation. Another possibility is that Republicans held competing values, mitigating against passage of an agricultural product disparagement bill. For instance, then-governor George W. Bush cited his concern for needless litigation as a reason not to support Texas' agricultural product disparagement bill. Or, as other theoretical literature suggests (Fenno 1973), perhaps Republicans were just not particularly interested in this form of policy.

Another explanation is that the values and policies of each party varies significantly from state-to-state (Brown 1995). Other research has indicated that some policies or issues cross party lines (Ringquist 1993). Some researchers have reported that environmental issues are on the agenda of both parties (Kau and Rubin 1979; Kalt and Zupan 1984; Nelson and Silberlay 1987). Farm policies may be an example of that phenomenon. In Texas, the sponsor of the bill in the legislature was a member of the Democratic party (Allen 1998). In fact, Democratic votes ensured passage of the Texas bill. The Texas House vote was 124-13, and the Senate vote was 12-2, in favor of passage (Allen 1998). A similar pattern can be seen in another Southern state, albeit one that was unable to pass an agricultural disparagement bill. In Maryland (a non-enacting state), one of the leading proponents of that state's bill was State Senator Walter Baker, a Democrat. Interestingly, opposition was also lead by a Democrat, State Delegate Samuel I.

Rosenberg (Brennan 1977b). The failure of partisanship to reach statistical significance also suggests that the individual preferences of legislators may be a more pervasive phenomenon than party leadership.

The finding here concerning the role of partisanship is not unprecedented. Other empirical research has failed to reach statistical significance (Hansen 1983; Beryy and Berry 1990; Hwang and Gray 1991; Minstrom and Vergari 1998). Since there is an equally weighty body of empirical research that reports the opposite conclusion (Chubb and Moe 1990; Hwang and Gray 1991; Nice 1994; Minstrom 1997), this is a classical example of the incremental nature of research. In the future, research should be directed not only at more case study examples of the role of party control, but perhaps more importantly, at an explanation as to why in some instances partisanship is significant while in others it is not.

In addition to party control, another hypothesis is that states that are less supportive of the environment are more likely to pass agricultural product disparagement legislation. The hypothesis is not supported. This confirms Reams' (1990) research and contrasts with Koontz' (2001). The finding here suggests that a state that has prioritized green policies may also value businesses. It may be that in the case of agricultural product disparagement policy, a state chose economics over the environment. However, it may not consistently make similar types of choices (business before environment). Agricultural product disparagement legislation may have occurred in response to a specific event, namely the Alar crisis. Like other large-scale media events, such as Love Canal or Three-Mile Island, the public will often respond differently to regulation than without such stimuli

(Mazmanian and Sabatier 1981; Vogel 1989; Sigelman 1990) Another plausible explanation is that state policymakers may not agree that agricultural product disparagement legislation is particularly anti-environmental. That last suggestion appears to be supported by the paucity of legislative debate about environmental issues attached to agricultural product disparagement legislation. The nexus between stifling speech about the quality of fruits, vegetables, and other farm produce and the health effects of pesticides may not be obvious if one superficially considers agricultural product disparagement legislation.

In contrast to commitment to the environment, two of the three variables designed to capture the affect of interest groups were statistically significant. Specifically, the presence of farmers shows a positive effect on bill passage. Thus, the fourth hypothesis, that a state in which farming interests are strong is more likely to pass an agricultural product disparagement bill, is supported. Conversely, strong environmental activists groups have a negative effect on bill passage. Again, another hypothesis is supported by the logit results: A state in which environmental public interest groups are not active, is more likely to pass an agricultural product disparagement bill. This is consistent with other published studies which have demonstrated the influence of interest groups over state policy (Daniels and Regens 1980; Lester and Bowman 1989;Wiggins et al. 1992; Ringquist 1994; Recchia 1999). Obviously, then, this finding contrasts to other empirical work in which researchers have concluded that environmental interest groups do not exert significant influence over state policy change (Zeller 1954; Weber and Shaffer 1972; Lester et al. 1983; Williams and Matheny 1984; Reams 1990; Davis and Feiock

1992) This research also runs counter to the public choice literature that has been based on the assumption that large groups are not very effective at influencing policy. In short, numbers matter. In a state with a large portion of the population who are activists, public law will reflect those interests.

This research also adds to the literature by reporting that environmental groups are not just effective in influencing passage of laws, but in influencing defeat as well. Confirming Schozman and Tierney's (1986) theory, environmental interest groups seem most effective when blocking legislation, rather than trying to obtain passage. The finding concerning the influence of environmental activists also is supported by the theoretical literature that concerned itself with the anti-majoritarian result if interest groups disproportionately impact public policy. Here, one must question whether environmental interest groups opposition to agricultural product disparagement laws comports with public opinion at large, or merely reflects a minority within the larger community.

These empirical findings are supported by a rich body of theoretical research. Since Madison's classic exposé in *The Federalist Papers*, the relationship between interest groups and public policy have been discussed. Here, the hypothesis that farmers as an interest group affected bill viability is supported. The result also suggests that farmers may be less environmentally minded than others, as reported by Dillman and Christensen (1975) and Calvert (1979). The finding also supports the qualitative literature that assumed that agricultural interests pressured legislatures to pass agricultural product disparagement bills.

However, the finding runs counter to some theoretical literature that contended that legislators are insulated or relatively unaffected by interest group activity. Kalt and Zupan (1989), for example, argued that legislators may ignore lobbyists in favor of their own ideological preferences. Similarly, Hird (1991) contended that policy makers may follow professional values rather than public preferences. This research suggests, to the contrary, that a public interest group can influence state policy. This study is also consistent with some prior research, such as Ringquist (1994) and Recchia (1999), both of whom reported a positive relationship between environmental activism and policy innovation. However, it contrasts with other environmental policy innovation literature which did not find statistical significance between environmental group activism and water quality regulation (Reams 1990). Future research may attempt to examine these contrasting results.

Surprisingly, the presence of the pesticide industry in a state did not exert a positive influence on bill passage. The logit analysis reveals statistical significance between defeat of an agricultural product disparagement bill and a state heavily dependent on farm chemicals. Thus, contrary to the original hypothesis, the presence of pesticides lessens the likelihood that an agricultural product disparagement bill will pass. This also means that the qualitative research that indicates that petro-chemical interests pushed agricultural product disparagement bills through legislatures (Semple 1995-1996; Scrochi 1996; Bederman et al. 1997; Colins 2000) is not supported here. One must consider the implications of the finding that the pressure of the pesticide industry operates as a negative influence

on bill passage. This finding was not in the expected direction. Thus, those who have argued that big business will not necessarily block environmental legislation is supported here.

Or, it may be that in a state where there is a significant chemical manufacturing presence, laws that would protect industry are not politically feasible. That is, the presence of industry may heighten environmental awareness and concern. There also may be an underlying factor at work; namely, where chemical companies have a heavier presence, there also may be heavier environmental degradation or at least perceived environmental degradation. Thus, the influence may reflect the state of the state environment and the political options available in light of a state's environmental conditions. Another possible explanation for the finding is that the pesticide manufacturers exerted political pressure throughout the country vis-à-vis farming associations; thus, the political might of pesticide companies may exist in states where their physical presence is not substantial, or otherwise is not reflected in the data used in this study.

The result of the logit analysis also undermines the notion that the business community is anti-environmental (David and Feiock 1992). The finding here is not unique, however, as others have reported similar outcomes (Regens and Reams 1983; Hays et al. 1996). This finding adds to the existing body of literature, because most prior studies were focused on whether business opposed environmental regulation. Here, the question posed was whether business would support legislation that was anti-environmental. In the case of the pesticide industry, in

contrast to qualitative literature, one can not conclude from this data that big business will aggressively support anti-environmental statutes.

This research also adds to our understanding of policymaking across the states, because it challenges a common theory among political scientists; namely, since the pesticide industry does not appear to have influenced agricultural product disparagement legislation, one would question whether it had access and a privileged position with government officials. Indeed, many of the states which rejected agricultural product disparagement legislation are also home to large chemical manufacturers, such as Louisiana. Another plausible explanation, however, is that farmers and farming organizations did the "leg work" for bill passage, and that chemical companies had no need to be directly involved.

Finally, the hypothesis that free speech groups would affect bill passage was not supported by this study. In contrast to the negative influence environmental groups have, the notion that free speech groups exert a similar influence is not supported here. Since indicator data was less than ideal, that may explain this finding. The ACLU will not release membership data, which would give one a better sense of the influence that organization may be able to exert in a state. As an alternative, this research used the quantity of published lawsuits in which the ACLU was a party in each state. As indicated in Table 20, only nine states had active ACLU organizations (Alabama, Florida, Georgia, Maryland, Michigan, New York, Virginia, Washington, and Missouri). Of those, only three, Alabama, Florida, and Georgia, have enacted agricultural product disparagement legislation. Thus, the outcome of the logit analysis is no surprise.

Another explanation for this finding is that in addition to the ACLU, various pressure groups, such as the Society of Professional Journalists, have also opposed agricultural product disparagement legislation (Niederpruem 1998). Or, it may be that the ACLU became involved only after agricultural disparagement bills were enacted. This appears to be supported by media accounts of involvement by the ACLU which date from the late 1990s, not the early and mid-1990s when the bills were being passed. Indeed, the leading group opposing agricultural product disparagement legislation, whose members include the ACLU, was not formed until April 1998, after most bills had already been passed. The ACLU itself did not release a formal statement opposing agricultural product disparagement bills until 1998 (Kim 1998). In conjunction with the finding about environmental interest groups, this finding may provide lessons to public interest groups in terms of how to achieve their political objectives: numbers and early intervention count.

Summary

Hypothesized variables were subjected to descriptive, bivariate, and multivariate analyzes. With the use of a statistical model, this research helps explain the influences on policy innovation in the form of agricultural product disparagement laws. Three independent variables, partisanship, support for the environment, and free-speech interest, were not statistically significant. Thus, the political variables of partisanship and free-speech interest can not help predict bill passage. The economic variable, environmental commitment, can also not help explain bill passage. The factors that proved statistically significant were ideology,

farming interest, pesticide interest, and environmental group interest. In short, the political variables of ideology and interest groups can help to explain bill passage.

States that have a conservative citizenry are more prone to pass an agricultural product disparagement bill. Similarly, farmers seem to have a positive influence on agricultural product disparagement bill passage. In contrast, the presence of environmental activist groups exerts a negative pressure on bill passage. Of these four variables that proved statistically significant, only the one capturing pesticide interests was not in the direction originally hypothesized. That is, in contrast to popular accounts explaining why agricultural product disparagement laws have been enacted, this research fails to support the proposition that pesticide companies exert a positive influence over bill passage. Indeed, a significant presence of the pesticide industry in a state makes bill passage less likely.

Chapter 5

CONCLUSIONS

Introduction

In Chapter Four the results of the statistical analyzes were provided. The multivariate analysis demonstrated the influence of ideology and farming interests as positively affecting bill passage, and pesticide interest and environmental group interest as negatively affecting bill passage. This chapter considers the policy implications for these findings. This research fits into the group of literature that addresses issues of general state policy. The research also has implications for the more focused group of research addressing environmental state policy. Finally, implications for legal policy may also be gleaned from this research. Each of these three categories are discussed in more detail below.

General State Policy Implications

Social scientists have used quantitative methodology to test policy change in the states for over three decades. This research fits within the broader group of social science research which focuses on comparative state policy using political and socioeconomic variables (Gray 1990), or insights into policy innovation across the states (Walker 1969). In essence, researchers seek an answer to the same central question: what factors help predict a change in policy at the state level?

Here, over fifty cases existed to test a very specific change in policy. Prior to the enactment of agricultural product disparagement laws, Americans had the right to complete free speech about fruits, vegetables, and livestock. With a change of policy at the state level, i.e., the adoption of agricultural product disparagement legislation, commenting about food safety and pesticides should now conform to "reasonable and reliable" science. If speech violates the "reasonable and reliable" standard, the publisher is subject to civil liability. Thus, this change in policy has attached an unprecedented cost to public debate about the health risks associated with foods.

The adoption of a new policy that only allows public discourse that comports with an amorphous standard of "reasonable and reliable" science, presents a significant departure in state policy. This policy took the form of a change in law from no regulation to statutes that provided civil damages for speaking ill and falsely about farm produce. These statutes are commonly known as agricultural product disparagement laws. Although only thirteen states have enacted agricultural product disparagement legislation, the implications of those laws may extend beyond their respective borders. First, the process of adoption is still on-going. Both Arkansas and Vermont have recently considered bills for an agricultural product disparagement law. Second, given the dissemination of information by the media and the internet, statements could be made outside the territory of an enacting state, but still provide a basis for a lawsuit.

Throughout the body of state policy research, multitudinous variables have been selected as possible predictors of policy change. Frequently, common

patterns across studies cannot be readily gleaned. Thus, part of the purpose of this work is to add to a relatively new body of literature. In common with many prior empirical studies, in this research, ideology proved a positive predictor on bill passage. This comports with theoretical political science research that posits that conservatives will pursue conservative policies, and vice versa. Often pro-business policies are associated with conservatives. Again, that sentiment is supported by this research. The finding concerning ideology is also significant because ideology is one of only a few variables that seems to be statistically-significant in many studies. Perhaps with further research one could begin to draw some more insightful conclusions about why and to what extent ideology is so significant to comparative state policy studies.

In addition to ideology, a quantitative analysis of interest group activity is presented here. Since Madison, scholars have been describing and theorizing about the role of interest groups in the polity. Traditional pluralist theory holds that interest groups have different points of access to the political process, and for issues of concern, will make their opinion known to lawmakers (Ingram and Mann 1989). As articulated by Lowi (1967:18) many legislatures often act "as if it were supposed to be the practice of dealing only with organized claims in formulating policy." That is supported by the research here, to the extent that farmers seem to positively affect bill passage, and environmental interest groups exert a negative influence on bill passage. What the research does not reveal, however, is the mechanism by which this functions, including whether there could be underlying or masked variables. For example, is the mere presence of large numbers of

environmentalists sufficient to adversely affect legislation, or do members have to actively lobby against it? Or, is it the farmers themselves that helped pass legislation, or is it the agricultural climate or environment of a state that supports passage?

The variables that did not prove statistically significant in this study also add to the literature of general state policy research. Since partisanship was not statistically significant, this suggests that ideology is a better predictor of state policy than party control. As indicated in Chapter One, researchers often employ both ideology and party control in state comparative studies. It may be that because conservatism is associated with bill passage, but Republicanism is not, that this is the type of issue that crosses party lines. Particularly in farm states, it seems reasonable to assume that Democrats could not ignore the concerns of one of their key constituents, farmers.

As discussed in Chapter One, party control has received due attention in the literature, often with conflicting results if one compares numerous studies. Again, this is another study that fails to find party control a significant predictor of policy innovation. This raises a variety of questions for future research about the nature of party politics. It may be, as Rose (1967) posits, that Republicans are the party of "laissez-faire," and thus shun government intervention in social problems.

On the other hand, that seems inconsistent with the rich body of literature whose central theme is that Republicans will enact policies beneficial to business. Lindblom (1959, 1980) writes that business has enjoyed a "special relationship" with government such that business needs are given "precedence over demands from

citizens." Industry will frequently engage in extensive lobbying efforts to defeat pro-environmental legislation (Freeman and Haveman 1972; Steck 1971). Here, there is not statistically significant evidence of that on the part of the pesticide industry, although these theories are demonstrated by the farmers' efforts. It also may mean that the pesticide companies played a behind-the-scenes role in the case of agricultural product disparagement legislation. This may make practical sense, if farmers are perceived as more politically palatable to legislatures, or not as obviously acting in the interest of pesticide use and environmental degradation.

Political science literature also includes theories about the policy making process (Jones 1984; Kingdon 1984). Jones identified five stages of the policy process: agenda setting, policy formation and legitimization, implementation, assessment and reformulation, and policy termination. This work reflects policy at the first three stages of policy making. As discussed in Chapter One, the genesis of agricultural disparagement bills was the Alar incident. This raised concerns among the farming community which in turn lobbied legislators for protective legislation. The formation of new policy occurred both in the public sector and private arena. While a Colorado legislator first introduced a bill, it took the resources of a farming organization and law firm to draft model bills for other states. Implementation of this new policy is at the heart of this research. What did it take for states to actually pass a bill? As indicated in Chapter One, while the majority of states have at least gotten an agricultural product disparagement bill out of committee, only thirteen passed their bill into a law. As further elaborated in

Chapter Four, this is the first known study to quantitatively analyze the factors that influenced bill passage.

Similarly, Kingdon (1984) uses a stream metaphor for the policy process. That is, Kingdon's theory is that a policy only gets formalized if what he calls the "problem" and "political" streams run together. Again, this study adds to that theoretical research by demonstrating the empirical circumstances under which that confluence may occur. Specifically, the problem hit farmers between the eyes with the Alar incident and subsequent unsuccessful litigation in Washington. At about the same time, the Washington legislature responded with an agricultural product disparagement bill, albeit it never passed into law. After that, at least thirty-three state legislatures put agricultural product disparagement legislation on their political agenda.

State Environmental Policy Implications

Comparative state environmental policy studies are in a relatively nascent stage (Ringquist 1994, 26). Moreover, comparative state environmental policy has largely focused on the issue of hazardous waste (Ringquist 1994, 26). This study, therefore, adds to existing literature by examining a unique form of environmental policy, agricultural product disparagement legislation. The findings here should add to the evolution of comparative state environmental policy research by reporting on a new context in which states try to resolve public policy issues, and the variables that appear to affect a state's willingness to innovate in this field of law. The study also adds to theoretical research by providing empirical support to those theories,

something particularly weak in the Political Science literature according to Ringquist (1994, 27).

Political scientists have reported that industry benefits from abusive environmental practices (Dunlap 1973; Davis 1970). Thus, scholars expect industry to lobby for legislation that will be detrimental to the environment (Stigler 1971; Meier 1985). As discussed in Chapter One, however, this is not always the case. While some research has empirically supported the notion that business will support anti-environmental legislation (Ringquist 1994), other research has contained the opposite conclusion (Williams and Matheny 1984; Regens and Reams 1988). The research in this study again questions the proposition that industry is necessarily anti-environmental. In fact, as other researchers have noted, in states where environmental degradation is severe, industry may not be able to insulate itself from pro-environmental legislation (Regens and Reams 1988; Lowry 1992; Hays et al. 1996). This research questions whether anti-environmental legislation can survive in a state with severe environmental problems. It may also suggest that after about thirty years of serious environmental consciousness and regulation, industry and those who make policy for businesses, are not "hard core" anti-environmentalists, but expect that environmental regulation is a part of doing business in the twenty-first century.

Another interesting aspect of this research has to do with rural and urban values about the environment. Survey and qualitative research has at times contended that rural states are the least pro-environmental (Davis and Lester 1989; Hall and Kerr 1991), and that farmers are the least environmentally conscious

(Buttel and Flinn 1978; Calvert 1979). However, not all research has so consistently reported the nexus between rural life and anti-environmental attitudes (Dunlap and Gale 1974). This study fits into prior research that has found farmers less environmentally-friendly than those in other occupations or those in urban areas. This suggests that farmers will put their economic interests over those of environmental quality. It may also be that farmers do not believe that chemical pesticides are as harmful to food safety or the natural environment as environmental activists do. This finding becomes particularly significant in light of the American movement toward using genetically-modified seeds and plants.

Another aspect of environmental policy research relevant to this study concerns itself with scientific uncertainty. As noted by one opponent of agricultural product disparagement legislation, "the statutes actually target science in the making — essentially encasing existing scientific assumptions by statutory legislation and preventing new assumptions from coming forward and new analyzes of cancer risks and other health risks" (Jaffee 1997). Repeatedly, scholars have noted the political and economic aspects of the science of ecology and health risks associated with the natural environment (Caldwell 1990; Howell 1992). Specifically, the process of risk assessment, now embedded in American environmental law and policy, is fraught with decisions that are not purely scientific, but political and economic as well (Rosenbaum 1998). From this perspective, agricultural product disparagement regulation is quite interesting, as the laws effectively negate the social and economic aspects of risk assessment, leaving those issues unexplored or determined solely by the scientific community.

This raises further questions about the nature of democratic decision making processes. For example, might states legislate in such a way as to preclude public input from other forms of environmental decision making? Agricultural product disparagement legislation effectively insulates pesticide risk assessment from public purview, but would it be possible for states to grant the same protection, for example, to the hazardous waste industry. At least one state, Louisiana, has considered legislation to prohibit speech about petro-chemical facilities.

This research also provides lessons for various political players. Environmental groups, for example, may be interested in knowing that their presence may, in fact, make a difference. Obviously, more research is needed to replicate the finding here, and to delve further into the role interest groups have on policy formation. Similarly, farmers could take from this research a model for political empowerment. Given that farmers have exercised their political rights in a variety of ways, for example public protest in the form of tractor blockades or destruction of crops, this research suggests that they can have influence in the state legislature, given a high-profile issue.

Legal Policy Implications

This research fits into the group of social science research, predominantly political science and sociology, which quantitatively analyzes the conditions under which bills will be passed into law (Glick and Hays 1991; Minstrom and Vergari 1998). This study also fits into other legal research that has considered why a legislature might pass a statute almost surely destined for constitutional doom. One

classic example is abortion regulation: despite severely restrictive covenants in some state's bills, legislatures continue to pass anti-abortion regulation, and continue to have it struck down in court. With agricultural disparagement statutes, again the overwhelming scholarly opinion is that they are, in fact, unconstitutional. With the exception of Idaho, however, state legislatures did not appear concerned with this fact. This raises the specter that legislatures could pass other speech-chilling statutes in order to protect certain industries, for example, hazardous waste handlers.

The research here also suggests that law making has functions other than the implementation of law. Laws may have symbolic value, or may be passed by legislatures eager to appease their constituents. Or, laws that will eventually fail for constitutional reasons, in the short run, meet their objective. That later comment seems to be suggested by the research here. There are numerous reported instances in which people have refrained from commenting about fruits and vegetables for fear of being named a defendant in an agricultural disparagement-inspired lawsuit. Indeed, the laws appear to be quite successful in quashing public comment about produce. It is also significant that plaintiffs are refraining from filing lawsuits. As discussed in Chapter Two, there are only five known lawsuits filed to date under an agricultural product disparagement law. As a legal tactic this makes sense, because once the laws are judicially declared unconstitutional, they will no longer act to chill free speech.

But perhaps the most significant legal implication of this research, is that it can stop information that may lead to good or sound policy. Had agricultural

disparagement laws been in affect in the 1960s, Rachel Carson's *Silent Spring* could not have been published. Beyond chilling speech about pesticide safety and produce, the laws may also affect other speech. Some have suggested that farmworkers may fear reprisal for talking about health risks associated with dermal and other forms of exposure to pesticides (Jaffe 1997). What this suggests is that under certain conditions, legislatures will chose one policy to the detriment of the other. In the case of agricultural disparagement legislation, in thirteen states, protecting farms and those who are economically dependent on farmers trumped concerns, if any, about free speech over food safety, pesticides, and farm worker's health concerns.

Perhaps one of the most significant findings of this study concerns its relation to qualitative research on agricultural product disparagement laws. This research both supports and contrasts to qualitative scholarly theories about agricultural product disparagement passage. In qualitative research, most legal scholars have assumed that the whole of agribusinesses were behind bill passage. That would include not only farmers, but pesticide manufacturers and other farm-related interests. This research does not support that assumption. To the contrary, here, the heavy presence of the pesticide industry in a state exerts a negative force on bill passage. This contrast in findings between qualitative and this quantitative research has other implications which have already been addressed under environmental policy implications, above.

This work also fills gaps or raises new issues in qualitative research. Namely, qualitative legal research has not really considered the role of ideology,

environmental commitment, or environmental activists in the passage or defeat of legislation. And, while qualitative scholars have assumed that the fight against agricultural product disparagement laws is the bailiwick of the ACLU, this research suggests that the presence of environmental interest groups may be a better predictor of legislative defeat. It may also be that free-speech groups or the ACLU should be entering the policy process earlier in order to have an effective voice.

Final Conclusions

In this research, the focus has been on the factors that influence passage of agricultural product disparagement legislation. This research found that four independent variables, ideology, farming interests, environmental interests, and pesticide interests, were statistically significant. That is, when a state has a conservative citizenry, and a strong farming community, it is more likely that that state will put an agricultural product disparagement law on its books. In contrast, states in which environmental groups and the pesticide industry are strong, are less likely to pass agricultural product disparagement legislation.

In the bigger picture, this research questions conventional wisdom in some significant respects: first, qualitative research that reported that industry was behind the passage of agricultural product disparagement legislation; second, that industry will support any anti-environmental regulation; third, that Republicans are largely responsible for pro-business, anti-environmental legislation, and; fourth, states which have a demonstrated commitment to the environment will not, consistent with that tradition, not enact anti-environmental legislation.

Finally, this research may provide insight into an on-going social and political issue - food safety. Concerns about food safety are increasingly important. Debates rage not only about the safety of pesticides,[1] but antibiotics in livestock,[2] irradiated foods,[3] recycling of animal waste in food,[4] food-borne illnesses,[5] and genetically-altered seeds, produce, and animals.[6] This research provides insight into the extent to which states will be effective in regulating public debate about these pressing contemporary issues.

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[1]For example, pesticide manufacturers or former farms may be designated a Superfund site. "Apple Orchard Yields Bitter Fruit," *National Geographic*, November 2000, no page cite in journal.

[2]John Buell, "Our Corporate Food Chain," *The Humanist*, November 21, 1997, 12.

[3]Ben Lillistand and Ronnie Cummins, "Food Slander Laws in the US: The Criminalization of Dissent," *The Ecologist* 27(6) (1997): 6-10.

[4]"Food Scares: Fear and Loathing," *The Economist*, August 21, 1999, 42.

[5]Justin Bachman, "CDC Says Rate of Food-Brore Illnesses Declining," Baton Rouge (LA) *Advocate*, March 17, 2000, 10A.

[6]Philip Brasher, "Farmers Like Biotech Soybeans Despite Costs, Safety Worries," Baton Rouge (LA) *Advocate*, June 18, 2000, 16A. Madeleine Nash, "Grains of Hope," *Time* (July 31, 2000): 38-46.

APPENDIX 1

MODEL STATE CODE TO PROTECT AGRICULTURAL PRODUCERS AND PRODUCTS FROM DEFAMATION

Section 1. Statement of Purpose.

To protect the free flow of agricultural products and producers thereof, as well as enhancing the general public welfare by proscribing the dissemination of false and disparaging information, the following sections are hereby enacted.

Section 2. Definitions.

As used in this Act, the following terms shall have the meanings stated below:

(a) the term "agricultural product" means any plant or animal, or product thereof, grown or raised for a commercial purpose; the term shall also include any agricultural practices used in the production of such products.

(b) the term "agricultural producer" means any person engaged in growing or raising an agricultural product, or manufacturing such a product for consumer use.

(c) the term "defamatory statement" means intentional words or conduct which reflect on the character or reputation of another or upon the quality, safety or value of another's property in a manner which tends: (i) to lower another in the estimation of the community, (ii) to deter third persons from dealing with another, or (iii) ti deter third persons from buying the products of another.

(d) the term "disseminate" means to publish or otherwise convey a statement to a third party but shall not include repeating a false and defamatory statement made by another unless the person repeating such statement knew or should have known the statement was false.

(e) the term "false statement" means a statement which either expressly includes a fact or implies a fact as justification for an opinion and such fact is not correct.

(f) the term "knowing the statement to be false" means the communicator knew or should have known that the statement was false; and
(g) the term "malice" means an intent to vex, injure, or annoy another.

Section 3. Criminal Liability.

Whosoever willfully or purposefully disseminates a false and defamatory statement, knowing the statement to be false, regarding another's agricultural product or an agricultural producer under circumstances in which the statement may reasonably be expected to be believed shall be fined (amount), imprisoned for not more than _____ year(s), or both.

Section 4. Civil Liability for Defamation of Agricultural Producers.

Whosoever willfully or purposefully disseminates a false and defamatory statement, knowing the statement to be false, regarding another's agricultural product under circumstances in which the statement may be reasonably expected to be believed shall be liable to producer or owner of such product for actual damages; provided that if the statement was made with malice, the producer or owner shall be entitled to punitive damages in an amount equal to at least there times the actual damages.

Section 5. Civil Liability for Defamation of Agricultural Products.

Whosoever willfully or purposefully disseminates a false and defamatory statement, knowing the statement to be false, regarding another's agricultural product under circumstances in which the statement may be reasonably expected to be believed shall be liable to producer or owner of such product for actual damages; provided that if the statement was made with malice, the producer or owner shall be entitled to punitive damages in an amount equal to at least three times the actual damages.

Section 6. Persons Entitled to Maintain a Cause of Action Under Sections 4 and 5 of this Act.

If a false and defamatory statement is disseminated with reference to an entire group or class of agricultural producers or products, a cause of action arises in favor of each producer of the group or class, regardless of the size, provided, however, that each member's cause of action is limited to actual damages of such member; provided further, that punitive damages are not so limited.

Section 7. Injunction.

In any suit filed under sections 4 or 5 of this Act, complainant can also request an appropriate court order prohibiting the defendant from disseminating false and defamatory statements about the agricultural producer or its agricultural products in the future.

Section 8. Attorneys' Fees.

In any suit brought under sections 4 and 5 of this Act, the prevailing party is entitled to an award of attorneys' fees in connection with the costs of the litigation.

Section 9. Effective Date.

This Act shall be effective upon date of enactment and shall apply to any false and defamatory statement published or otherwise communicated after that date.

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Eileen Jones received her B.A. in Political Science, Honors Program, from Temple University in 1985. Subsequently, she earned her J.D. from Temple University School of Law in 1988. Upon completion of law school, Ms. Jones practiced law in the Philadelphia area as both a law clerk and attorney. Her experience focused on toxic torts, contracts, and general litigation.

Her journey to Tulane University was in quest of a Ph.D to further her understanding of environmental policy. To that end, she earned an M.A. in Political Science from Tulane. During her studies, Ms. Jones also worked on various environmental research projects both at Tulane and Xavier University of New Orleans. Also while at Tulane, Ms. Jones taught paralegal courses in Tulane's University College. Currently, she holds a position as Assistant Professor of Law at Southern University Law Center. Her research and publication interests include environmental justice, wetlands policy, agricultural disparagement laws, South African environmental policy, and genetically modified foods.