Timing and Sequence in Agenda Setting and Policy Change: A comparative study of lawn care pesticide politics in Canada and the U.S.

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One of the strengths of the agenda setting and policy change research tradition, as noted in the introduction to this volume, has been its dedication to temporally-based research. In many cases, agenda setting scholars were at the forefront of what some claim is a "historical turn" in political science toward "placing politics in time" (Pierson 2000, 72). Agenda setting scholars have long been investigating policy processes that unfold over a decade or more even as other political scientists continue to focus on static relationships. Studies of agenda setting assume that longitudinal research is required to illustrate and explain the rise and fall of issues on agendas and the punctuated nature of policy change. Less common are studies which treat time itself as a variable that helps to explain the particular trajectory of a policy issue or set of issues. The relative lack of comparative agenda setting research helps explain the shortage of studies devoted to this theoretical issue. To appreciate the importance of timing, we must examine agenda setting and policy change processes around similar issues in two settings, where the timing and sequence of key events and strategies differ.

This paper examines differences in agenda-setting and policy change around the issue of lawn care pesticides¹ in the United States and Canada. I argue that the timing and sequencing of events, actor mobilization, and venue shifts significantly shaped the divergent paths of the conflicts. In both countries, the "cosmetic" use of lawn care pesticides on public and private property came under increasing criticism in the late 1980s and early 1990s. Environmental and health groups started demanding both voluntary efforts and regulatory measures designed to decrease the use of non-essential lawn care pesticides in local communities. Over the next ten to fifteen years, however, the campaigns in the two countries took quite different trajectories. By spring 2005, over seventy Canadian municipalities had banned or severely restricted the

¹ I use the term "pesticides" generically to refer to chemical compounds used to kill unwanted plants or animals. Pesticides include herbicides, insecticides, rodenticides, and fungicides.

cosmetic use of lawn care pesticides on both public and private property. In the United States, restrictions have been much more modest and the issue occupies a less prominent place on local and national agendas. I argue that the relative mobilization of competing advocacy groups at the start of the campaigns, and successful venue shifts at key moments in the conflicts affected subsequent policy developments. As the literature on path dependency suggests, early competitive advantages became self-reinforcing (Pierson 2000, 81).

In the first part of the paper, I briefly outline the centrality of timing and sequence in the agenda setting and policy change literature and suggest ways to further our understanding of their importance. In the second half, I compare the conflict over lawn care pesticides in the U.S. and Canada with an eye toward highlighting the importance of timing and sequence in explaining the different trajectories of the conflicts.

Timing and Sequence in Agenda Setting and Policy Change

The policy process literature has long assumed, and explicitly argued for, the need for temporally-based research. Even the largely outdated "stages" model of the policy process recognized time as an important element in policy research by suggesting that issues progress through identifiable stages, beginning with agenda setting and ending with policy implementation and evaluation (see Jones 1970; Anderson 1975; Brewer and deLeon 1983). Walker's (1969) classic study of state policy diffusion also launched a research agenda in which temporality figured prominently. The notion that policy innovations can diffuse across state borders as a result of policy learning, interstate competition, and public pressure for reform highlights the temporal nature of the policy process. Quite simply, policy change in one state (or locality) may be influenced by the previous actions and experiences of other states. More recently, the agenda setting literature has emphasized and illuminated the temporal nature of politics. In Kingdon's (1984) streams model, timing—the bringing together of multiple elements at a particular point in time—is instrumental in explaining agenda and policy change. Sabatier and Jenkins-Smith (1993,1999) insist on studying policy processes over periods of a decade or more to capture the effects of policy-oriented learning on policy change. For Baumgartner and Jones (1993), longitudinal studies reveal the dynamism of the American political system, as abrupt, relatively permanent, and significant policy changes are revealed as distinct "policy punctuations." Like the path dependence approach, Baumgartner and Jones (2002, 13) argue that initial events in a sequence can lead to a "cascade of subsequent events that dramatically change the status quo."

A close appreciation of temporality means that understanding *when* a focusing event, venue change, or "external shock" occurs (in a sequence of events) might be just as important as knowing that they occur at all. Policy scholars have identified each of these factors as important agents of agenda and policy change (Kingdon 1984, Birkland 1997, Baumgartner and Jones 1993, Sabatier and Jenkins-Smith 1993). But the impact of the factors depends in part on whether and to what extent competing interest groups are organized around an issue, their relative power at the time of the event, and their organizational structure. As Birkland (1997, 36) argues in his examination of focusing events, attention to an issue after a focusing event may be short-lived, and policy activity (beyond attention) may be lacking if "there are no advocacy coalitions available to exploit the event for policy change." If an event occurs when policy reformers are absent or relatively unorganized, then there will be little to no post-event policymaking; on the other hand, if it occurs when policy reformers are well organized and highly active, post-event policy change is likely.

The amount and kind of resources that interest groups possess relative to their opponents at the time of a significant focusing event, venue change, or external shock will also shape subsequent policy developments. As Pierson (2000, 81) points out, "Success in competition for political space depends not simply on the resources at one's disposal. Rather, what generally counts is the scale of those resources relative to those of others contenders." Powerful advocacy groups might overwhelm their opponents and fill the political space opened up by a key event. Finally, how advocacy groups and coalitions are organized at the time of key events affects future political and policy developments. The structure of groups and coalitions presumably changes over time, as they respond to challenges, opportunities, and threats in their political environment. Thus, *when* a venue change or other event occurs in the organizational life of an advocacy group/ coalition makes a difference. As the case study here will show, if an advocacy group is organized in only one venue, the addition of a new arena for decision making may pose significant organizational challenges. On the other hand, if a group is organized at multiple levels, it will be able to adjust to venue changes more easily.

Timing and sequence not only influence the relative impact of events but also shape the strategic opportunities available to political actors. Opportunities to venue shop, for example and to do so successfully—will vary in time. A venue shopping strategy may be more successful at one point in a conflict than at another because of the varying structures of bias within institutions and because of changing levels of public attention to (and therefore pressure on) various institutional actors to respond (or not) to interest group demands. A "veto strategy," whereby an interest groups uses one venue to veto a policy change in another, may be less feasible as attention to an issue increases and pressure builds at all levels (or branches) of government to do something about it. The conflict over the use of lawn care pesticides in the United States and Canada provides a useful case to examine the validity of these claims given the similarities and differences between the cases. The next section begins to examine some of these similarities.

Pesticides Regulation in Canada and the United States

Authority over pesticides regulation in Canada and the United States, despite institutional differences in the two countries, is similarly structured. The federal government has primary jurisdiction over pesticides regulation through national statutes (the Pest Control Products Act in Canada and the Federal Insecticide, Fungicide, and Rodenticide Act—FIFRA—in the United States) that require the pre-market registration and classification of pesticides. Provinces and states retain some authority over pesticides regulation. For example, Canadian provinces can control the classification of pesticides for sale and use, and may be involved in training applicators, restricting the use of highly toxic chemicals, and requiring notification of pesticide applications by pest control operators, among other things.

In both countries, local authorities played little role in pesticides regulation until the 1980s, when campaigns in the United States and Canada to restrict the cosmetic use of lawn care chemicals emerged. Up to this time, the issue of lawn care pesticides was not on the agenda of either country. Controversy around pesticides generally concerned the agricultural use of pesticides; indeed, the majority of pesticides sold in the U.S. and Canada are used for agricultural purposes and consumers have long been concerned about pesticide residues on fruits, vegetables, and other food products (see Bosso 1987). But increasing suburbanization in both countries in recent decades has expanded lawn coverage and ushered in an era of intensive chemical management of the suburban landscape (Robbins and Sharp 2003; see also Jenkins.). Antipesticide activists started turning their attention to urban uses of pesticides, noting that

homeowners applied pesticides in greater concentration than farmers even if their aggregate use was less. When studies indicated that some of the most popular lawn pesticides—the herbicide 2, 4-D for example—had been found to be toxic to humans, public concern about their safety spread.

Some of the first efforts to regulate lawn care chemicals emerged from local city councils who targeted pesticide use in public parks, residential areas, and around schools and day-care centers. These efforts raised questions about the authority of localities to enact restrictions that went above and beyond federal and state/ provincial pesticide regulations. Indeed, jurisdictional questions became a heated battleground in the conflict over lawn care pesticides, finding their way to the Supreme Court in both countries. In June 1991, the U.S. Supreme Court ruled that FIFRA did not preempt the regulation of pesticides by local governments. Ten years later, the Supreme Court of Canada found that municipalities had the authority to regulate in the interest of a community's health and welfare.

These decisions were important "windows of opportunity" (Kingdon 1984) for antipesticide activists because they opened a new venue for pesticides regulation—local city councils. But in Canada, the campaign against lawn care pesticides has been more successful than its counterpart to the south, success being measured by the saliency of the issue, the relatively rapid diffusion of local pesticide bylaws, and the comparative strength of these bylaws. I argue that the particular sequencing of events and venue shifts, along with the relative mobilization of different interests at the start of the campaigns helps to account for the differences between them. More specifically, the pesticide industry was far better organized than anti-pesticide activists at the time of the U.S. Supreme Court case, and lobbied successfully for state preemption laws. These laws put a damper on the diffusion of local pesticide ordinances

and had a moderating effect on the movement. In contrast, anti-pesticide activists in Canada were more politically astute and better organized than the pesticides industry from the start. By the time the Canadian Supreme Court decision was handed down in 2001, attention to the issue was high, restrictive pesticide bylaws were already in effect in many localities, and the movement was gathering momentum. The Supreme Court case, unlike that in the U.S., led to a further wave of local anti-pesticide ordinances. The key differences between the two cases are summarized in Table 1. The next sections develop the argument by comparing the lawn care pesticides campaigns in the United States and Canada.

[TABLE 1 ABOUT HERE]

Lawn Care Pesticides in the U.S.: State Preemption and the Curtailment of Anti-pesticides Activism

The issue of lawn care pesticides emerged on the agendas of local, state, and national governments in the United States in the 1980s. At the local and state level, regulatory efforts generally focused on requiring public authorities and commercial lawn care companies to notify residents about sprayings, either in advance or after-the-fact, so that chemically sensitive individuals and parents of school children could take protective measures.² At the federal level, the issue of lawn care pesticides was debated in Congress, but little action was taken on the issue and jurisdictional ambiguities under FIFRA remained.³ Similar jurisdictional questions were

² One source estimates that forty towns or counties across the country had enacted ordinances regulating pesticide applications by the mid-1980s (Chuchville 1985); another claims that by 1989 six states had passed laws requiring both pre- and post-notification while four states required either advance warnings or post-notification (Herbert 1989). It is difficult to verify the number of local pesticides ordinances in the U.S. and the year they were enacted, as there are over 83,000 local jurisdictions in the U.S. and there is no central database of local pesticides regulations. ³ In 1986 and again in 1990, the Government Accounting Office issued a Congressional report criticizing the Environmental Protection Agency for making little progress in assessing the health risks of lawn care chemicals (Government Accounting Office 1986, 1990). Congress considered whether states and localities should be able to set their own pesticide limits in 1986 and 1992, but in the end were silent on the issue of local pesticide regulation (Davis 1986). In 1991, Senator Joseph Lieberman argued unsuccessfully for a national notification law that would warn neighbors before pesticides were professionally applied.

making their way through the court system. In 1985, the small town of Casey, Wisconsin passed an ordinance which required permits for pesticide use and allowed the town to ban aerial pesticide sprayings. A group of farmers, timber industry representatives, ranchers, utility companies, and rail lines challenged the ordinance in court on the grounds that FIFRA preempted local regulation. Their position was affirmed by state courts but overturned in the U.S. Supreme Court in 1991, which found in *Wisconsin Public Intervenor v. Mortier* that no conflict existed between the local regulation and federal law. Localities, it appeared, were free to enact their own pesticides regulations.

At this point in the conflict, the pesticides industry was better organized than antipesticide activists around the issue of lawn care pesticides. The pesticide industry had been watching developments at the federal, state, and local levels with a keen eye. In February 1991, following a year of organizational meetings with key industry leaders, CropLife America (the premier lobbying organization of the agricultural pesticides industry) created an affiliated group called Responsible Industry for a Sound Environment (RISE) but continued to work closely with CropLife America and other related trade groups. These alliances proved particularly helpful in the wake of the June 1991 Supreme Court case. In July 1991, one hundred and eighty industries and organizations, including the National Agricultural Chemical Association, the American Farm Bureau Federation, and the U.S. Chamber of Commerce, formed the Coalition for Sensible Pesticide Policy (Palmer 1992). The industry groups (having failed in federal venues) immediately began lobbying state legislatures to pass preemption laws barring localities from regulating pesticides. Their efforts were remarkably successful. In 1992-1993, twenty state

legislatures passed preemption laws; at present, forty-one states have enacted some version of a pesticide preemption law.⁴

The success of the industry at changing the rules of the game was due to a number of factors. As already noted, the pesticides industry was highly organized both before and immediately after the Supreme Court case. More importantly, perhaps, they were better organized than their opponents. Environmental and health groups, according to Allen, "were not nearly as well organized as [they are] now" (phone interview 2005). Environmental groups, for their part, freely admit that they were relatively unorganized at the time and did not possess the resources to fight state preemption laws: "In several states people really tried [to fight the bylaws]," Shawnee Hoover of Beyond Pesticides said, "but we didn't have enough resources, we couldn't be in all places at once, we couldn't battle it out in every state legislature" (phone interview 2005). Another activist explained the success of the preemption movement this way: "People did not realize what was happening. They [industry groups] were very organized and acted quickly...There was not enough grassroots activity to counter their effectiveness."5 Caroline Cox of Northwest Coalition for Alternatives to Pesticides (NWCAP) claimed that the relative lack of local regulations at the time inhibited the development of a strong opposition: "One problem was that there were few locals who had passed laws. They would have gone to bat to protect them [the local regulations], but there were hardly any of them" (phone interview 2005).

⁴ See National Association of State Departments of Agriculture, "Federal Pesticide Regulation Preemption," *Backgrounder*, June 22, 1993. Prior to 1992, about ten states had preemption laws. Today, Alaska, Hawaii, Maine, Maryland, Nevada, South Dakota, Utah, Vermont, Wyoming, and the District of Columbia are without preemption laws. See Beyond Pesticides, "State Preemption Laws: A Beyond Pesticides Factsheet."

⁵ Phone interview 2005. The interviewee wished to remain anonymous. In Maryland, environmental and health groups were successful in fighting a proposed state preemption law. This was due in part to the higher level of antilawn care pesticides mobilization in Maryland compared with other states at the time. Since at least 1983, several counties in the state had been active on the issue. As one activist from a Maryland-based organization said, "Our organization was aware and we testified against the preemption law" (phone interview 2005).

The industry was also quick to for coalitions. The lawn care pesticides campaign targeted the much smaller non-agricultural sector of the pesticides market; even so, the agricultural division of the industry joined the preemption campaign. Agricultural interests feared that local efforts to regulate lawn care chemicals might expand to their sector and therefore worked to prevent such a development (Delaney, phone interview, 2005). Tom Delaney of Professional Landcare Network (PLANET, formerly the Professional Lawn Care Association of America) explained the industry's success this way: "It was due to groups working together and agriculture being involved...The entire pesticide community had to work together" (phone interview 2005). James Allen of RISE also gave credit to the alliance: "Agriculture became engaged because they saw any erosion of preemption as adversely affecting them...They did a lot of the work" (phone interview 2005).

In contrast, anti-pesticides groups did not work in coalitions to nearly the same degree as industry. While activists were mobilized in some localities, particularly in Long Island, New York and Montgomery County, Maryland, their efforts were relatively scattered and uncoordinated. In fact, it would take over ten years for activists to create a national coalition and campaign against lawn care chemicals; it was not until 2004 that Beyond Pesticides created a national alliance of anti-lawn care groups, over twenty years after they began working on the issue.⁶ While a national coalition would not have guaranteed more victories against state preemption laws, in the absence of such a network, supporters of local pesticides regulation were at a disadvantage. Quite simply, they lacked the additional resources, information-sharing, and strategic lessons that a coalition might offer.

⁶ Shawnee Hoover of Beyond Pesticides said that the demand for a national coalition arose in 2003 from grassroots groups; today, almost five hundred groups—local individuals and groups, as well as a few national environmental organizations like Defenders of Wildlife and the Sierra Club—belong to the coalition (phone interview 2005).

The pesticides industry, in addition to being better organized than their opponents, had moved the conflict to a highly favorable venue—state legislatures. At the state level, the pesticide industry had both access and power. According to Allen, "State legislators are familiar with agriculture and familiar with urban pesticide management. On the whole, whether Democrat or Republican, they tend to take a balanced view" (phone interview 2005). Tom Delaney agreed that state venues afforded the greatest advantages: "I think at the state level we have the best representation and communication, both with state legislators and state bureaucrats" (phone interview 2005). The success of preemption laws meant that the pesticides industry would not have to expend its resources battling regulations in countless municipalities. As Delaney noted, "It is very tough when you dilute it down to a smaller level to have industry there [to fight legislation]" (phone interview 2005). Allen claimed that municipalities "can pass legislation in two to three weeks...before industry has input" (phone interview 2005). Some localities have enacted regulations despite preemption laws (much to the frustration of those in the pesticides and lawn care industry), but overall, the preemption campaign represented an important rule change in favor of industry.

The spread of state preemption laws impeded the nascent anti-lawn care pesticide campaign by constraining the kinds of regulations it pursued and by dampening the diffusion of local ordinances. The preemption laws forced activists to target public parks departments and school boards in hopes that these government agencies would voluntarily restrict their use of lawn chemicals (Cox, phone interview, 2005). Anti-pesticide activists were thus limited in their targets and in the types of restrictions they could demand; broad regulations that would apply to both public and private use of lawn care chemicals were generally prohibited by the preemption laws. As Hoover of Beyond Pesticides stated in response to the question of why the movement

faltered in the early years, "We came up against preemption" (phone interview 2005). Even today, with a revival of the anti-lawn care pesticide campaign, preemption laws continue to shape the movement. The two main national campaigns against lawn care chemicals use a markets-based strategy for reducing the use of lawn care pesticides, targeting national landscaping chains like TruGreen Chemlawn and box stores including Home Depot and Lowe's. These groups have targeted the marketplace in part because the legislative route to change has been foreclosed in some cases and has proven extremely difficult in others (Schuren, phone interview, 2005).

In sum, the 1991 Supreme Court case giving localities the right to regulate pesticides did not lead to a cascade of local anti-pesticides ordinances as might be expected, but instead mobilized the better organized pesticides industry. In the wake of the decision, the industry shifted venues and effectively changed the rules of the game in ways that curtailed the spread and strength of the anti-lawn care pesticides campaign.⁷ This stands in contrast to the Canadian case, where industry initially lacked the organizational resources and political savvy of its counterpart in the U.S. By the time the Supreme Court of Canada ruled on the issue, the antilawn care movement was gaining momentum and the industry was struggling rather unsuccessfully to slow down the diffusion of municipal pesticide bylaws.

Lawn Care Pesticides in Canada: Policy Innovation and the Diffusion of Local Pesticide Bylaws

In Canada, awareness and concern about the potentially harmful effects of lawn care chemicals grew in the 1980s and 1990s as it did in the United States. Pesticide reform was on the

⁷ The spread of local anti-smoking laws in the United States serves as an interesting comparative case. The tobacco industry, faced with a growing number of local restrictions on smoking in public buildings and restaurants, also attempted to enact state preemption laws. Charles Shaipan and Craig Volden (2005, 25) found that where states had passed preemption laws "limiting the ability of localities to exceed state standards, further city adoptions [of smoking regulations] were dramatically reduced or curtailed altogether."

federal government's agenda as politicians, bureaucrats, industry representatives, and public interest organizations all recognized the need to revamp the outdated 1969 federal pesticides law governing the pre-market testing and registration of pesticides. At the local and provincial levels, attention was more narrowly focused on the issue of lawn care pesticides. As early as 1989, several small community groups in Ontario lobbied their town councils to enact moratoriums on and bans of lawn care pesticides on public property (Mironowicz 1990). A few provinces were also active: in 1990, for example, Ontario passed the first provincial law requiring notification when lawn care chemicals were used on public property and in residential areas by lawn care professionals (Israelson 1990).

The key policy innovation came in April 1991 when the small town of Hudson, Quebec passed By-law 270 prohibiting non-essential uses of lawn and garden pesticides on public and private property. Hudson's bold policy innovation—severely restricting the cosmetic use of pesticides on private as well as public land—caught the attention of activists and officials in neighboring Quebec towns. Meryl Hammond, one of the central figures in the lawn pesticides campaign and leader of the effort in nearby Baie-d'Urfe to pass a similar bylaw, said that her group "came in on the coattails of what Hudson did. We never would have had the idea if not for Hudson" (phone interview 2005). Katrina Miller of the Toronto Environmental Alliance agreed, claiming that "Hudson [Quebec] punched through a wall that no one had tried to take a whack at" (phone interview 2005).

Hudson's innovation spread. By the end of 1995, at least twenty-one municipalities in Quebec had some version of a private property pesticide bylaw and several more were considering one. At this point, coordination and communication within the anti-pesticides campaign grew. As Meryl Hammond noted, "There was lots of sharing of information. Copies of

bylaws were going everywhere along with draft bylaws. You just had to fill in the blanks.. There was a big informal network" (phone interview 2005). Hammond herself developed a guide for activists and local politicians entitled "Pesticide Bylaws—Why We Need Them and How to Get Them." She also traveled to various municipalities to encourage activists to "keep going," "to get around road blocks," and "to not believe that it [the campaign] was only in Quebec" (Hammond, phone interview, 2005).

The informal network of anti-pesticide activists soon set out to create a more formal alliance. In 1996, Toronto Environmental Alliance, Sierra Club of Canada, World Wildlife Fund, Citizens for Alternatives to Pesticides, and the Canadian Labour Congress launched the Campaign for Pesticides Reduction (CPR) and staged press conferences to encourage the national diffusion of anti-pesticide ordinances (Rickman 2004). Within a year, the original coalition of regional and national environmental/ labor groups had expanded to a network of seventy-five organizations. Groups within the network shared resources and information about successful pesticides campaigns through the Internet, via email, and sometimes in person. These networks were an important factor in the diffusion and success of the municipal bylaws campaign. Anti-pesticide activists suggested that without them, the movement would have remained fragmented, with small towns pursuing bylaws in isolation without the benefit of broader knowledge, experience, and expertise (Rickman 2004).

In the early to mid-1990s, the relative organization of anti-pesticide activists and propesticide industry groups was almost the mirror opposite of that in the United States. As suggested, anti-pesticide activists were well organized: the diffusion of Hudson's bylaw and favorable rulings by the Quebec Superior Court in 1993 and the Quebec Court of Appeals in

1998 giving localities the authority to regulate in this area emboldened grassroots activists.⁸ The alliance between local groups and national environmental organizations provided the antipesticide campaign with grassroots mobilizing capacity as well as national visibility, greater access to resources, and presence at all levels of government.⁹ As Hammond attested, "The big groups provided enormous credibility and access to national arenas" (phone interview 2005). On top of this, environmental groups had made alliances with labor (on the grounds that lawn care chemicals endangered workers in the landscape business) and with physician's organizations. These latter alliances were especially helpful, according to activists. Physician-based groups such as the Canadian Cancer Society and the Lung Association lent expertise and legitimacy to the campaign; as Kathleen Cooper of Canadian Environmental Law Association attested, "We had doctors beside us…and we did not come off as wild-eyed and crazy" in front of often very conservative city councilors (phone interview, 2005).¹⁰

The rapid mobilization of anti-pesticide groups stands out against the pesticide industry's relative lack of organization and coordination. While the lawn care and pesticide industries became better organized over time, they were late to get started. As Debra Conlon of CropLife Canada said, "Industry did not take the Hudson issue seriously enough. We didn't ask how to isolate it and stop it from growing versus just reacting to it...Our industry did not see the trend"

⁸ Chemlawn and Spraytech, two lawn care companies charged with violating Hudson's bylaw, challenged the ordinance in court. The companies charged that municipalities in Canada did not have jurisdiction over the issue and claimed that the bylaw conflicted with federal and provincial legislation which had already deemed the chemicals safe and legal for use.

⁹ Of the one hundred and twenty environmental groups in Canada in 2002 who reported that they worked on pesticides issues, eighty-five worked at the local or regional level, twenty-eight at the provincial level, and sixteen at the national or international level. Data collected from the *Green List: A Guide to Canadian Environmental Organizations and Agencies*, 3rd edition, 2002. Seven groups did not report the scope of their activities.

¹⁰ U.S. anti-pesticide activists lamented the relative lack of support from medical associations in their campaigns. As Hoover of Beyond Pesticides said, "Doctors are an important voice in the community. They are very credible, their expertise is respected and needed to weigh the options for policymakers. Often doctors can tip the scale...If the AMA [American Medicial Association] came out like in Ontario, it would have been a very different story at the national level. It is difficult nationally because it is difficult to get big medical groups together on this" (phone interview 2005).

(phone interview 2005). Another industry analyst admitted that "there is a tinge of regret from some LCOs [lawn care operators] who realize that had the industry been organized in the first place, they might be winning the battle" (Stahl 2004, 28). Chris Lemcke of Weed Man (a lawn care chain) agreed: "If the Green Industry had started lobbying and getting involved in the local politics years ago, it would not likely be in this position today" (qtd. in Stahl 2004, 28).

With the growth of strict anti-pesticide ordinances at the local level, industry was forced to battle each pesticide proposal at the grassroots. According to Conlon, pesticide trade organizations like CropLife Canada were ill prepared to fight battles in hundreds of city councils around the country. The industry was organized and active in national and provincial venues because pesticide regulation was traditionally carried out at these levels. According to both environmental activists and industry spokespeople, industry was "way more sophisticated at the federal level" than at the local level (Cooper, phone interview, 2005). Conlon of CropLife Canada admitted, "We were not organized at the local level and we are still not organized there. You have to be interacting with them [local communities] on a daily basis" (phone interview 2005). Local venues, according to Conlon, were not particularly receptive: "We had zero clout, zero energy [at the local level]. We would fly in where there was a problem, expect to give our say and that is because traditionally this level was not regulated" (phone interview 2005). Industry leaders in the U.S. confirmed Conlon's assessment; Allen of RISE said that the pesticides industry in Canada did not have the funds, manpower, organizational structure, or networks to fight the bylaws campaign (Allen, phone interview, 2005).

Because the Canadian lawn care pesticides sector was much smaller than in the U.S. (and therefore lacked the resources to fight the bylaw movement on its own), it needed to form alliances with other affected industries such as the agricultural pesticides sector and landscaping

companies. However, the various affected industries failed to form strong, working alliances at the start of the campaign. The relative absence of coalitions can be attributed in part to antipesticide activists who found ways to divide the opposition. Hudson's bylaw (which became a model for many other municipalities) excluded agricultural uses of pesticides and exempted golf courses for five years; according to one industry analyst, this left the lawn care industry "to fight on its own" (Stahl 2004, 23). Over time, the pesticides and lawn care industry joined together and waged more sophisticated grassroots opposition campaigns. In 2001, for example, lawn care professionals, golf course superintendents, and pesticide manufacturers formed a coalition to fight Toronto's proposed bylaw. However, in the face of a probable ban by the Toronto city council the coalition faltered; lawn care companies broke with their allies and made a deal with the city council for a partial ban (Stahl 2004). The coalition, which had plans to raise one million dollars a year to fight the bylaws movement, disintegrated. In other cases, if city councils rejected a pesticides bylaw or delayed a decision in the face of opposition, anti-pesticide groups would simply wait until the next year and lobby again for a bylaw. As Hammond said, "They [industry] couldn't be everywhere all the time. They might come in one year and delay it [a bylaw], but anti-pesticide activists would persevere" (phone interview 2005).

By 2001, anti-pesticide activists had ten years of advocacy behind them, several examples of successful bylaws, and had generated a good deal of media attention. However, their success in passing strong bylaws was largely confined to Quebec province. Local governments outside of Quebec were reluctant to enact restrictive bylaws due to jurisdictional uncertainties and for fear of getting sued by industry. This changed in 2001 when the Canadian Supreme Court endorsed the right of municipalities to regulate pesticides in the interest of a community's health and welfare. Before the Supreme Court decision, only one municipality outside Quebec

had passed a pesticide bylaw; after the decision, municipalities in Nova Scotia, New Brunswick, Ontario, and British Columbia adopted anti-pesticide ordinances. Kathleen Cooper of the Canadian Environmental Law Association claims they were "bombarded" by phone calls after the Supreme Court decision: "Everybody was waiting for that decision" (phone interview 2005). As shown in Figure 1, adoption of bylaws spiked after 2001. As of spring 2005, about seventy municipalities had passed various forms of municipal pesticide bylaws. According to one estimation, when these bylaws come into full effect close to thirty-six percent of the Canadian population will be covered by the laws (Christie 2005).

[FIGURE 1 ABOUT HERE]

Comparing the Cases

The 2001 Canadian Supreme Court decision in *Hudson* was the "mouse the roared," a focal event that nationalized the anti-pesticide campaign and led to the diffusion of anti-pesticide ordinances across Canada (see Pralle 2006). This stands in contrast to the U.S. Supreme Court's decision in *Wisconsin Public Intervenor* ten years earlier, where the decision did more to activate the pesticides industry than mobilize anti-pesticide activists. The different results in the two cases are due largely to the relative mobilization of anti-pesticide groups and pro-pesticide industry groups at key moments in the campaigns. As illustrated in the case discussions and summarized in Table 1, mobilization patterns at the start of the anti-lawn care campaigns in the two countries were nearly the reverse of one another. In the early 1990s, pro-pesticide interests in the U.S. were well organized and used their superior resources to prevent (or at least deter) the enactment of strict pesticide ordinances at the local level. In Canada, anti-pesticide activism was sparked by Hudson's bold policy innovation in 1991, and the movement gathered momentum over the next decade in the face of rather weak and ineffectual opposition by industry groups.

One practical result of these differences was the movement of conflict to different policy venues which favored different sides in the policy conflicts. In the United States, the propesticide alliance targeted state legislatures, a venue that proved particularly receptive to its demand for preemption laws. The laws, as a practical matter, have not prohibited pesticide regulation at the local level but they did have a chilling effect on the enactment of highly restrictive ordinances like those found in Canada. While anti-pesticide activists could attempt to overturn the state preemption laws, none have successfully done so and few have tried. Caroline Cox of Northwest Coalition for Alternatives to Pesticides said they had "talked for years about trying to overturn preemption laws" but claimed that "under current conditions it was not possible" and that such plans were not in the group's three year strategic plan (phone interview 2005).

In short, the industry's initial competitive advantage led to significant rule changes that curbed local action on pesticides. The industry's goal was (and continues to be) to avoid having to fight at the local level. Jim Campanella, President of the Professional Lawn Care Association of America in 2004, admitted that his group was working to get preemption laws in the remaining states without them so as to avoid local battles: "We have things under control on national levels. It's at the state and local level that we're vulnerable. We don't have the manpower to mobilize on the local level" (qtd. in Stahl 2004, 23). Today, the industry is particularly worried about states that border Canada, such as New York, Minnesota, and Wisconsin, fearing that residents and politicians in those states will be more influenced by the Canadian example (Allen and Delaney, phone interviews, 2005). At the same time, Delaney doubts that any U.S. campaign will go as far as Canada: "It won't happen on that scale. The first

one is always the worst because it can be duplicated...Once it is done in one place, there is a higher likelihood to get it in another" (phone interview 2005).

In Canada, the pesticides and lawn care industries were also vulnerable at the local level, but unlike their neighbors to the south, they were forced to battle anti-pesticide activists in numerous local venues. Not only did this tax the industry from an organizational point of view, but each battle attracted media attention and appears to have led to the further diffusion of pesticide ordinances. (As shown in Figure 2, media attention increased gradually in the 1990s and then jumped dramatically after 2000; media attention in the U.S., however, has increased much more gradually and attention overall is lower). As diffusion models suggest (see Berry and Berry 1999), local governments "borrowed" Hudson's innovation after being pressured from their constituents, many of whom were aware of bylaws in neighboring towns and cities. Diffusion was also fuelled by local officials who learned about various legal, political, and implementation issues from other municipal employees. Indeed, anti-pesticide activists were not the only ones sharing information and strategies. Networks sprung up among municipal officials, creating the kind of sub-national communication and innovation described in other studies of policy diffusion (see, for example, Martin 2001).

[FIGURE 2 ABOUT HERE]

Anti-pesticide activists in Canada did not consider local venues to be the ideal arena for action on lawn care pesticides. Their preference, understandably, was for federal or even provincial action. As early as 1994, Hammond and others met with the Canadian Minister of Health, urging her to pass a federal law banning the cosmetic use of lawn care pesticides. But after a chilly reception from both federal and provincial officials, activists focused largely on local arenas (Hammond, phone interview, 2005). The town-by-town strategy they adopted, while

successful, has led to uneven regulations and has required a good deal of grassroots organizing, persistence, and patience (Hammond, phone interview, 2005). More recently, however, the issue of lawn care chemicals has "trickled up" to higher levels of government, another sign of the campaign's success. In 2003, for example, the federal government announced a "Healthy Lawns Strategy," a joint project of the Pesticide Management Regulatory Agency and the provincial governments whose goal is to reduce reliance on lawn care pesticides by using less chemically-intensive methods of landscape management. As the movement has grown policymakers at higher levels have been forced to respond to the problem.

Conclusion

Studies of agenda setting and policy change are notable for their sensitivity to the temporal dynamics of politics. Policy processes unfold over time and we cannot hope to understand patterns of agenda and policy change, much less what factors shape them, without considering long time frames for our analyses. Studies of agenda and policy change must also consider how the timing and sequencing of events, actor mobilization, and actor strategies shape the development of policy conflicts. Comparative agenda setting scholarship is useful for understanding these dynamics because one can examine similar policy conflicts where timing and sequencing differ.

This paper has explored agenda setting and policy change around the issue of lawn care pesticides in the United States and Canada. The analysis confirms Pierson's (2000, 82) more general statement about the importance of timing relative to actor mobilization and resources: "[A]ctors who achieve a critical mass of political resources might be able to manipulate the rules of the game in ways which increase their organizational advantages over potential competitors." In the United States, an apparent victory for anti-pesticide activists in the 1991 Supreme Court

case triggered a strong counter-mobilization by industry. The industry was able to change the rules of the game through the enactment of state preemption laws. Put differently, industry got to the states first, thereby locking out certain strategies and solutions for the near and possibly long-term future. If the movement to restrict lawn care pesticides had been better developed, the industry's venue shopping strategy would likely have been less successful; state legislators, under different circumstances, might have felt pressure to allow localities to enact the regulations.

In the Canadian case, anti-pesticide activists changed the informal rules of the game by seeking strict regulations at the local level—a level that previously had had little role in pesticide regulation and where the industry was relatively unorganized. The pesticides industry was caught off-guard and its initial response was rather weak, leading to the further diffusion of private property pesticide bylaws in Canada. By the time of the 2001 Supreme Court decision, the anti-lawn care pesticide movement had been gathering momentum for over ten years and the necessary mechanisms were in place to nationalize the bylaws campaign. Any venue shifting strategies by the industry at this point in the campaign were less likely to be successful. For example, industry attempts to change provincial law to make local regulation unconstitutional have largely failed. The political context—one characterized by high public support for and mobilization around pesticide restrictions—makes such a strategy untenable. Simply put, the time for such a strategy is not ripe.

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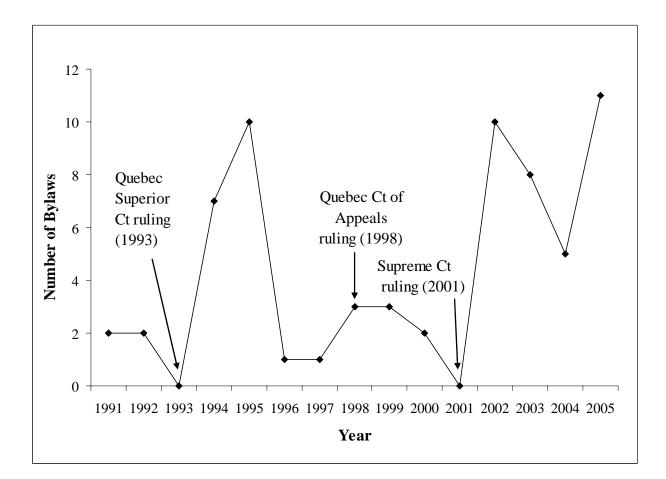
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Stahl, Jason. 2004. "Under Attack." Landscape Management 43 (2): 22-28,

Walker, Jack L. 1969. "The Diffusion of Innovations Among the American States." American Political Science Review 63: 880-899. Table 1: Comparison of Canadian and U.S. campaigns against lawn care pesticides in the early to mid-1990s.

	United States	Canada
Mobilization Patterns, early to mid-1990s		
Relative mobilization of industry groups	High	Low
Extent of coalitions and coordination among industry groups	High	Low
Relative mobilization of anti- pesticides groups	Low	High
Extent of coalitions and coordination among environmental/health/community groups	Low	High

Figure 1: Annual number of Canadian private property pesticide bylaws enacted, and key court decisions, 1991-2005^a



a. A total of 65 municipal bylaws are represented. The dates of enactment for the remainder of the bylaws could not be confirmed either through documentary evidence or by phone calls to the municipalities.

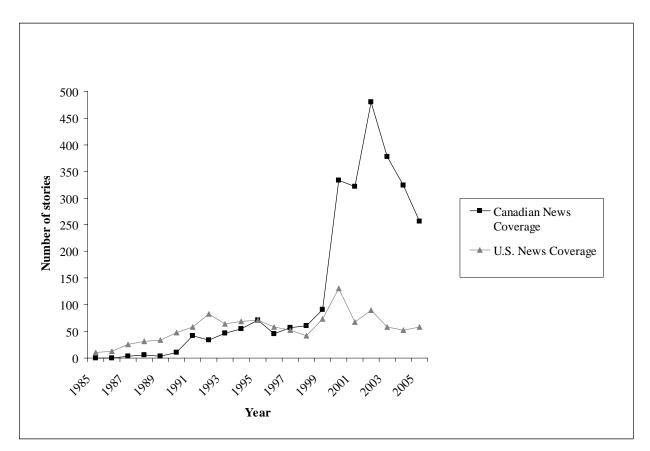


Figure 2: U.S. and Canadian news coverage of lawn care pesticides, 1985-2005^a

a. From Lexis-Nexis. Search terms = "Pesticides" in Headline, Lead Paragraph, Terms; "lawn care" in Text. Thirty news sources, including national and regional newspapers, were included in each search.