MUNICIPAL BY-LAWS AGAINST HUNTING IN QUEBEC: AN OBSTACLE TO WILDLIFE MANAGEMENT AND DAMAGE CONTROL

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Abstract: A study performed in 2000-2001, showed that a large number of Quebec's municipalities have adopted by-laws to control or forbid the discharge of firearms within their territorial limits. Among the aforementioned municipalities, 9% actually forbid or control hunting itself, while 62% forbid or control the use of firearms. Unfortunately, these by-laws are being implemented at a time when territories around cities are facing a substantial increase in wildlife management problems. The issue is compounded by the fact that the majority of these by-laws occur in areas where the incidence of wildlife-related damage to agriculture and vehicles are the highest. These wildlife-related damages are mostly caused by black bears, whitetailed deer, moose and greater snow geese, whose populations are increasing in Quebec. Considering that hunting is recognized as a viable management tool for damage control and wildlife management, these municipal by-laws that further reduce hunting activities around cities, are therefore contributing substantially to this ever increasing problem. This action will impact not only wildlife management issues but Quebec's hunters as well. Indeed, hunters are facing more barriers to their activities, resulting in a desertion of this sport and an aggravation of the problem. Therefore, government wildlife managers along with our Federation are working on legal and other types of solutions to protect hunting activities, based on social realities and their benefits to society.

Key words: game animals, human/wildlife conflicts, hunting, municipal by-laws, regulation, territories, wildlife damage, wildlife management

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INTRODUCTION

The Quebec Wildlife Federation (Fédération Québécoise de la Faune, FQF), a non-profit / non-governmental is organization Ouebec. Canada. in representing anglers and hunters. Its mission is to promote the development of hunting and angling, in a partnership with all the Government agencies responsible for wildlife management and development. Thus, the FQF's goal is to expand hunting and angling in Quebec while insuring the sustainability of both wildlife and wildlife-related activities for future generations.

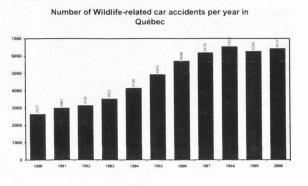
The Société de la Faune et des Parcs (FAPAQ) is the governement agency responsible for wildlife management and for hunting, fishing and trapping laws and regulations. It also manages parks and reserves and promotes a sustainable development of wildlife resources while ensuring conservation. FAPAQ has been involved in this work from the very beginning, evaluating all legal implications of the situation.

For the last 15 years, the FQF has been studying a new and paradoxical issue in the province of Quebec; municipalities are increasingly voting by-laws that forbid or limit the practice of hunting inside their territorial limits. Most of these by-laws are aimed at ensuring security and tranquility to citizens which may result in controlling the use of firearms inside city limits. However, a few of these by-laws are directly aimed at forbiding hunting itself, which is normally a provincial government prerogative (FQF 2001). As well, it becomes a problem when the same by-law applies to the non-urban territory inside the municipality's jurisdiction.

The non-urban and forested areas inside a municipal territory, where hunting is possible, is called the "peri-urban" territory. It shelters a wide variety of species, often attracted by the benefits generally found around human settlements and activities, such as "easy food" and shelter (FAPAQ 2001). The species found in peri-urban territory include important game species such as white-tailed deer, black bear and greater snow goose. Thus this territory is highly suitable for the development of hunting, as it offers new hunters with game close to home, and at a relatively low cost. The quality of hunting is also in such a territory since the animals are often concentrated around precise areas such as crops and fields.

These peri-urban areas are also characterized by a variety of human / wildlife conflicts that could be partially resolved by the development of hunting (FAPAQ 2001). In some cases, populations of the white-tailed deer and greater snow geese, have exploded to levels where they have became real social problems (Bouchard 1989; FAPAQ 2001; Gignac et al. 1999; Jean et al. 1999; Lagacé and Bellemare 1997; Lamontagne and Gignac 1996, 1997; Munro et al. 2001). These species, which were previously limited to a smaller distribution, have taken over new territories and are therefore impacting agricultural lands and cultures. As well, the larger mammals have also become a real danger on roads as is shown by the drastic increase in the number of wildlife-related car accidents (Figure 1).

Figure 1. Temporal evolution of the number of wildlife-related car accidents / year in the province of Quebec (Canada) (Ref. Société de L'assurance Automobile du Québec).

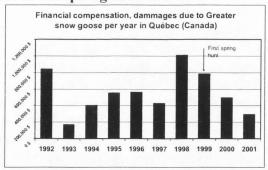


In the St. Lawrence Valley, the greater snow goose population has become so high that between 1998 and 2000, crops in the central region of the valley were literally destroyed by their grazing. In this particular case, a spring hunt had to be "invented" as a remedial plan to help land owners and cereal producers who had to be compensated every year for their financial losses (Figure 2). Both experience and literature confirm that hunting is an ideal short-term and long-term management tool for wildlife-related conflicts (FAPAQ 2000, Conover 2001a, Lamontagne and Gignac 1999, MLCP 1989).

Thus, as hunting is recognized by many managers as a viable tool to manage and control human/wildlife conflicts, municipal by-laws that hinder the practice and the development of hunting have become a major setback (FQF 2001). Development of hunting as a socio-economic activity, a legitimate pastime and a wildlife management tool is rapidly becoming impossible in some areas. That is why the FQF and the FAPAQ have performed the present study, with the following goals :

- Obtain a general and precise portrayal of the municipal by-law situation in the province.
- Survey the hunter community to obtain their views and solutions to the present issue.
- Survey the Quebec population to obtain the public's conception of hunting as a pastime as well as the relative importance of this activity in today's society.
- Create a remedial action plan in order to meet the hunter's needs regarding the development of hunting, the Government's need to manage wildlife-related issues and the municipalities' needs regarding their territory.

Figure 2. Temporal evolution of the financial support paid-up to compensate for lost crops due to damages inflicted by the greater snow goose in the province of Québec (Canada) (Ref. La Financière Agricole du Québec). Note the immediate effect of the spring hunt in 1999.



METHODS

To gather information and solutions on this particular issue, many sources had to be explored. For this reason, three different surveys were carried out:

- A provincial survey of the population to examine the social role of hunting and hunters, the actual popularity of hunting and the reasons for its rejection by a part of the population.
- A provincial survey among hunters (i.e., FQF members) to estimate the real impact of the problem from their point of view and to define a course of action.
- A provincial survey among municipalities to perform an overview of the by-laws that apply in the province and to determine the importance of this issue in Quebec.

Along with these surveys, a review of existing laws and regulations in Quebec and in surrounding states and provinces was performed.

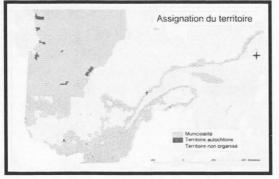
RESULTS

The province of Quebec covers a land area of 1,700,000 km² (656,374 mi²) and is the home of nearly 7,500,000 people, mainly concentrated in the southern, (i.e. widely privatized) portion of the province (Figure 3). These areas are those where the highest concentrations of human activities and influences are found. It is also a part of the province where some species such as greater snow goose and white-tailed deer are expanding their distribution.

In Quebec, 486,000 homes, representing 1,184,000 residents, own one or more hunting firearms. Unfortunately, only 542,000 of these residents were registered as firearm owners in 2000; a larger proportion of which seem to be males over 45 years of age. Among these families, a total of

807,000 people have been registered as hunters and 377,000 people do not hunt but keep a firearm in their residence (FQF 2001).

Figure 3. The province of Québec: municipal territories, non-organized territories and native reserves. Note that most municipalities are concentrated in the southern part of the province, where most of the lands are private and where games animals are expanding their distribution.



Among these registered hunters, 715,000 have been hunting at least once during the last five years, with 41% hunting every year and producing 70% of all hunting effort. Interestingly enough, most active hunters were in the 15-34 year old and the 45-65 year old classes. Sadly, many hunters are thinking of abandoning soon, because of age in the case of older people and because of decreasing access to adequate hunting sites (i.e., restrictions imposed by private land owners and municipal by-laws) and complex regulations (i.e., firearm registration) for younger ones. Moreover, 9% of hunters have already decided to abandon hunting because the recent Canadian firearm registration law is too complex to follow and 7% are currently thinking about it for the same reason. In fact, globally, 36% of all hunters are saying that their hunting activities will decrease in the next 5 years while a lesser proportion (24 %) will increase their activities.

The public survey showed that 49 % of the population has a negative opinion of hunting, which is in majority explained by the fact that hunting includes the killing of animals. Others reasons are cited, such as a sense of danger related to firearms and hunters behavior (e.g. trespassing). The probability of being against hunting increases with age and level of education. It is also higher among women.

According to FQF members, the most acceptable solutions to the municipal bylaws phenomenon are to engage a dialogue with municipalities and adopt a new set of provincial regulations to answer their specific needs (FQF 2001). These regulations would include:

- No discharging of firearms within 100 meters from any residential or institutional building.
- No discharging of firearms from public roads and shoulders.
- Higher penalties for hunting trespassers.

These solutions, combined with a general provincial law that would recognize the right to hunt, should allow for a better development of hunting activities and recruitment of new hunters, while also providing the necessary sense of security and control to municipalities. Nothing can be done however to fight the "bambi syndrome", whereupon people tend to give human attributes to animals (i.e., anthropomorphism).

Among the 1,499 municipalities, villages, cities and native reserves in Quebec, only 71 did not answer the poll. A total of 90 different types of by-laws against hunting or against the use of hunting weapons exist in the province (Figure 4). A total of 10% of municipalities have by-laws that forbid or limit hunting, whereas 53% have one or more by-laws that forbid or limit the use of hunting weapons, mainly firearms. But some also regulate the use of

crossbows and bows as well (2%). A temporal study of the situation showed that these by-laws were virtually non-existent

before 1995 and that they started to appear at a very high rate after that (Figure 5).

Figure 4. An overview of the diversity and distribution of municipal territories where one or more bylaws impact on hunting and hunters, province of Québec (FQF 2001). This map has nine different information patterns due to software capabilities but our results show a total of 90 different types of by-laws in the province.

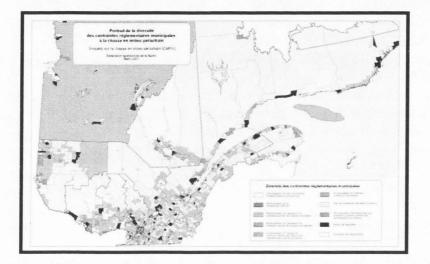
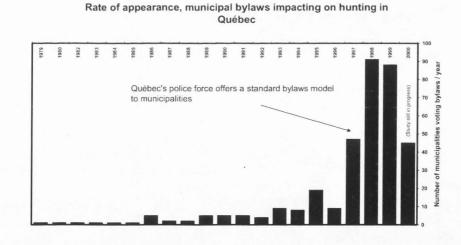


Figure 5. Rate of appearance of municipal bylaws impacting on hunting in the province of Québec (FQF 2001). Note the immediate effect of the Québec's Police Force standard bylaws model once distributed to municipalities.



DISCUSSION

Our paper does not cover the entire extent of our results. Therefore, it is

important to review a few elements in order to understand the next steps.

Our actions, and the various steps that were taken since, are the work of FQF

and its Government counterpart, FAPAQ. It is an answer to an issue that has been growing in importance in the last decade. It is an unresolved issue, which our wildlife managers are faced with, and which will require the development of new and innovative solutions.

In Quebec, since many species have increased population abundance. in agriculture and transportation need these solutions so that conflicts between human communities and wildlife can be managed and resolved satisfactorily. In particular, the peri-urban territory, where a wide variety of resources are available and where many demands must be met, needs to receive attention when it comes to wildlife management. The southern part of Quebec is a prototype territory in which to study this particular issue.

Hunting has been proven for us a capable management tool in a short-term and long-term approach to control animals that have important interactions with human activities in the peri-urban territory (FAPAQ 2001). Therefore, the impact of an exploding game animal population on human interests (agriculture, transportation, security, etc.) can be controlled by hunting, providing that it is applied in an integrated development plan of the territory and that hunters have the proper access to hunting sites.

By restricting access with municipal by-laws that impact hunting activities, the population of Quebec has put an obstacle to this new management task of controlling wildlife. One would have thought that managing wildlife when the game is abundant and the hunters are not would be easier. The Ouebec experience is a demonstration that it is not the case. In fact, within the Quebec society, probably as it happens elsewhere in North America, there is now a social trend to increase expenses in compensation for lost crops, car accidents, casualties on roads and damages to domestic

structures by animals. Meanwhile, many agree that the real need would be to invest in developing a comprehensive approach using hunting and all its socio-economic benefits.

However, with this study's results, we are now able to determine what the cause of this phenomenon is and how to rectify the situation. The task is clear:

- Hunting as a sport must be further developed.
- Hunters must abide by rules and adopt behaviors that will demonstrate their legitimacy.
- Society must create tools so that municipalities can ensure safety and peace of mind to their citizens, without banning hunting.
- The same task should involve private lands and their owners so that there is a better respect for their rights and concerns (i.e., trespassing) and a better dialog between them and hunters.
- The province should adopt a legal recognition of hunting to induce a legitimacy to this wildlife management tool.

By comparing the results of all surveys, we found a clear indication that it is possible to further develop hunting in Quebec. The simple fact that so many people live in houses where hunting firearms are stored, demonstrates that the immediate family is an important pool to search for new hunters. Indeed we believe that the passing on of hunting skills between parents and children is still active in the recruitment of new hunters.

There are still, however, some hunters of all age classes that are thinking of abandoning this activity for many reasons. One of the most interesting elements here is that restricted access to hunting sites and complex regulation are mostly responsible for this trend. However, we could predict that municipal by-laws could become a part of this problem and that reaching any pool of potential new hunters will possibly be more difficult in a situation where this phenomenon is growing.

Thus, the fact that the number of municipal by-laws appearing in the province every year has jumped from ~5/year to nearly 80/year in less than three years is not to be ignored. The reason for this sudden change in Quebec's dynamics is that the provincial police force, enforcing laws in municipalities where there is no municipal force, recently (1997) issued a new standard "model" for municipal by-laws so that their across the province would be work simplified (FQF 2001). Among the various articles proposed in this document, there is one about forbidding the discharge of a firearm within a distance of 150 meters (492 ft) from any building. By itself, this type of by-law is not a problem but, in many situations, it has been extended to all the urban territory regardless of the presence of any building. Many municipalities have adopted and emplemented this model without proper knowledge of the impact it would have on hunting activities. By the time hunters started to receive subpoenas, the problem had grown to an irreversible state.

As for the general negative opinion of nearly half the population of Quebec, concerning hunting and the killing of animals, it is well known that this problem is still growing elsewhere in North America. More and more people in our province as well as elsewhere, are living an urban life and the link they once had with the environment is being lost at an alarming rate. The solution in this matter resides in education of the population concerning wildlife issues and management. Some steps were taken to achieve this goal but there is still much to be done.

The next step is to demonstrate to municipalities that they can achieve their

goals of security on their territory by other means than banning hunting. In this approach, the FQF worked with the FAPAQ to introduce a bill to legislative assembly. The bill is now adopted and gives hunting, fishing and trapping a new legal recognition:

- Section 1.3: Every person has a right to hunt, fish and trap in accordance with the law.
- Section 1.4: No person may knowingly hinder another who is lawfully carrying on an activity referred to in the first paragraph of section 1.3, including the preparations for such an activity.

The new law also gives landowners new tools to develop wildlife resources on their property. According to new legal arrangements, it is now possible for them to obtain help from conservation officers and legal representation by the Government in court, providing that owners accept hunters on their property. With this approach, it is likely that trespassing will be easier to control and that private lands will be more accessible to wildlife activities in the near future. Hence, it is now possible to discuss on a local basis with municipalities in order to find solutions that are acceptable to all parties involved. This new strategy is based on the "grass root effort," local and regional done by hunters associations work themselves. In order to achieve that, many tools were produced in support for local actions:

- A manual: How to create a dialog with municipal officers, which was distributed to hunters and hunting associations ("grassroot effort").
- A poster: What is true about hunting and wildlife management, which was distributed to every municipality in the province (education).
- Additional advertising material: Demonstrating the safety of hunting in Quebec (e.g., perception

problems, no one ever killed by a hunter in Quebec) and hunting's legitimacy. This tool was distributed in 2002 everywhere in the province throughout tourist agencies and social institutions (education and advertising).

As for the next changes in regulations, a model for the use of firearms from public roads and their shoulders (urban areas, semiurban areas and forested lands) is currently being elaborated. Once completed, it will probably have a positive impact on the public's opinion about hunters and hunting in general.

CONCLUSION

In Quebec, the wildlife management philosophy has to be reviewed in order to adapt to new realities that clearly demonstrate that "wildife management is a discipline inside a discipline" (Conover 2001b). An increasing number of game species, once scarce and managed so that a large number of hunters needed strict regulations to insure conservation, are now sometimes seen as pests. The reality now is that society in this province must manage a large number of game animals, using the best technical and financial tools to meet demands from a wider social instance. Todays, the weight of legal constraints applied to hunting activities is making its appeal dwindle.

In such a situation, municipalities have to adapt their needs with those of hunters and wildlife managers. Only through dialog will it be possible to find real solutions to this problem. As well, we believe that the tools we have created are an important part of the process.

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