Canadian Environmental Law Research Foundation

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#### MOTORIZED SNOW VEHICLES AND ALL-TERRAIN VEHICLES

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BRIEF TO THE

# SELECT COMMITTEE OF THE LEGISLATIVE ASSEMBLY OF ONTARIO

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#### MOTORIZED SNOW VEHICLES AND ALL-TERRAIN VEHICLES

## I INTRODUCTION

The Canadian Environmental Law Research Foundation is a voluntary, non- profit coalition of lawyers, scientists, and lay people formed for the purpose of researching the law as it relates to environmental matters, suggesting and working for improved laws, and urging better enforcement of legal protections presently available.

Some understanding of scientific and technical aspects of environmental problems and of the wishes and needs of the general public is necessary to the writing of usable law in this field. Our staff, therefore, is not limited to persons with legal training but represents many areas of interest.

One form our research takes is maintaining a complaint service in conjunction with our Toronto office, through which we attempt to answer questions and givê guidance about legal, medical, technical, and assorted other aspects of pollution problems. The input of complaints lets us know a good deal about the things people in general see as problems. This service receives about sixty complaints a month, more than half of them about noise. A very high proportion of the noise complaints - perhaps half of them - have to do with vehicle noise.

#### II NOISE

Several members of this committee asked to have a few comments on noise included in our brief. Noise is the most prevalent, and most complained of, of all environmental contaminants. It is the least understood by people in general and has the fewest legal controls. From our experience of two years and hundreds of complaints, we feel that noise is one of our more serious social problems. Sound, as it enters the ear, is air pressure - air pressure, that is, in excess of atmospheric pressure. The unit of measure is the decibel. The decibel scale on which we measure runs from 0 to somewhere near 200. 0 decibels is about the softest sound a normal ear can hear. O decibels corresponds to a pressure of two ten-thousandths of a microbar (a microbar being one millionth of the typical atmospheric pressure). We can also hear sounds more than one thousand billion times as intense - 120 dB(A). Anything louder is apt to be painful and to do instant damage to the ear.

(Tremendously loud noises, such as the sonic boom, that are as great as the atmospheric pressure - about 194 dB(A) - are usually measured in pounds per square inch.)

Because a scale with billions of steps would be inconvenient, we use a logarithmic scale based on the ratio between a measured sound and the reference pressure of 0. Thus we can manage with a scale of less than two hundred steps.

On this scale, 10 decibels is ten times as intense a sound as 0 decibels, and 20 decibels is one hundred times as intense as  $0_{\circ}$ 

Loud speech is around 80 decibels on the "A" scale. A hovercraft, at 110, is one thousand times as intense. In an ordinary description, you would say it is at least eight times as loud, since, to the ear, sound seems to double in loudness every seven to ten decibels.

Human beings have, in fact, a remarkable ability to judge that one sound is twice as loud as another. With a large enough group, you can build a loudness scale on the jury system.

# A-Scale

The human ear is less sensitive to some sound frequencies - the very low and the

very high pitched sounds - than others. The A-scale takes this into account and "hears" much like the human ear - at least until you reach extremely loud noise levels. When the noise is as loud as a jet engine the ear becomes so fully excited that it is almost equally sensitive to all frequencies.

#### Frequency

We must also consider frequency when we speak of sound, i.e., whether the sound is high or low pitched. The human ear is most sensitive to sounds between 1,000 and 4,000 cycles per second. It is generally considered that we can hear between twenty and 20,000 c.p.s. (Actually, we can hear down to one c.p.s. if the noise is loud enough.)

# Human Response to Noise

Noises below 30 dB(A) are very quiet, usually pleasant sounds - a whisper, a leaf rustling, a breeze.

Sounds in the 30-40 dB(A) range are what you might expect in a rural area or a very quiet bedroom at night.

#### Sleep Interference

Sleep disturbance begins, for light sleepers, at about 40 dB(A). Some sleepers will waken, others will move from deep sleep to a lighter, less restful sleep, due to sound intrusions at this level. A louder noise will waken or disturb the sleep of a higher proportion of people, until at about 65 dB(A), 60% of sleepers waken or are disturbed. If sleep disturbance occurs frequently, people waken "tired after a full night's sleep". If normal dreaming is too much interfered with, people exhibit neurotic or even psychotic symptoms.

A noise of 90 dB(A) outside a house or cottage will result in 82 dB(A) inside,

if windows are closed.

Persons being serenaded by snowmobilers with any frequency have justifiable complaints. They are being literally physically assaulted.

#### Communication

Speech interference begins at about 50-55 dB(A). At 60 dB(A) use of the telephone becomes difficult, and at 70 it becomes nearly impossible. Against noise of 80 dB(A), one can communicate only by something akin to a shout, and radio and television begin to be unintelligible. It is at this point that extreme annoyance and vehement protests against the noise maker are generated.

#### Deafness

Irreversible nerve damage to the ear begins at 80-85 dB(A), if the sound is heard over long periods of time. (Actually, hearing damage deafness probably is due to all loud sounds, of whatever intensity, heard throughout life.)

An irreducible 10% of frequent users of loud vehicles, those with especially sensitive ears, suffer severe hearing damage within a few months or years. An average snowmobiler who used a typical machine (108 dB(A) at the driver's ear) 40 hours a week would have a 50% chance of being deaf in ten or eleven years. If the noise were cut to 100 dB(A), the risk would still be 30%. At about 85 dB(A), the risk, over forty years, drops to 10%.

A regulation which has come into force this year under the federal Motor Vehicle Safety Act permits over 100 dB(A) at the driver's ear.

Hovercraft, most motorcycles, and, in fact, nearly all our noisy toys are doing unmeasured but definite damage to the hearing of drivers and riders who use them more than briefly and intermittently. This, of course, includes young children, whose parents have no moral right, and probably should have no legal right, to so expose them.

Audiometric tests at regular intervals can reveal hearing damage before it becomes severe. The conscientious parent of a juvenile rider would provide such hearing tests as regularly as he provides medical or dental attention.

Risk to hearing becomes much less if the machines are used only in short bursts of a few minutes at a time. Criteria for noise exposure set up by the Committee on Hearing and Bio-Acoustics (CHABA) of the National Acoustical Society and the National Research Council suggest the average machine be used for no more than thirteen minutes on any one day (or in short bursts of six minutes with tenminute resting periods). The average of the new machines, which give about 100 dB(A) to the driver, could safely be used for forty minutes on any one day (or in twenty-minute bursts with seven-minute resting periods).

For longer use, ear plugs or earmuff type hearing protection should be worn. This would not make it more difficult to hear warning signals, but might actually improve comprehension. High levels of noise overload the hearing mechanism so that even heard speech cannot be understood. A reduction of 20-40 decibels in all noise, wanted and unwanted, can be achieved by using hearing protection.

#### Other Physical Dangers from Noise

Since speech communication must consist of shouting when the ambient sound level is much above 80 dB(A), and even the loudest shout, car horn, etc., cannot be heard more than about six feet over a 100 dB(A) noise, it is clear that warning sounds and signals will not be heard by persons riding hovercraft, snowmobiles, etc.

The physical danger to the driver of some sort of collision is, of course, compounded by danger to others, when snowmobiles are used along roads, or in residential areas, or to trespass on private property where small children may be out of doors.

# "Drunk" Drivers

There is an awareness that drinking can result in drunk snowmobile drivers. But there is a lack of awareness of another sort of "drunk" on the roads.

Recent research into infrasound<sup>1</sup>, that is, very low frequency sound, shows that great intensities of sound below 100 cycles per second can have unpleasant and dangerous physical effects on persons in charge of a fast vehicle.

The research was done on noise levels inside small cars. It was found that infrasound sufficient to interfere with alertness and concentration, reaction time, and balance were present, in such a car, driven at 60 m.p.h., with the windows open. On the A-scale the noise would have measured between 80 and 85. Other physical effects of such noise are: loss of eye focus, nystagmus, blurring of vision, dizziness, a generalized sense of being unwell, and, eventually, extreme fatigue.

Infrasound occurs at high levels in both transportation and industrial plants. Leventhall<sup>2</sup> measured 116 dB of 15 cycle per second sound in a small car at 60 m.p.h.; 118 dB at 11.5 c.p.s. in a two-seat helicopter travelling at 70 knots, etc.

No similar studies are available of very low frequency noise from the vehicles with which we are concerned here. It is not usual to measure noise below 31 c.p.s. It would appear, from the data available, that hovercraft, some motorcycles, and some snowmobiles are capable of emitting enough infrasound to affect the driver's vision and judgement and to, in a sense, make him "drunk".

1. Bryan, Dr. Michael, and Dr. Wm. Tempest, "Does infrasound make drivers 'drunk'?", <u>New Scientist</u>, 16 March 1972, pp. 584-6.

2. H. G. Leventhall cited in Bryan and Tempest, op. cit., p. 584.

#### Cutting the Din

All these vehicles (with the possible exception of hovercraft) can be (and have been) made quieter. Better exhaust and carburetor in-take mufflers; better engine enclosure, using heavier stock and sound absorbing material; and better designed drive train, in the case of snowmobiles, will do a great deal.

Even more could be done by switching to a radically different engine such as the Wankel. With a properly enclosed Wankel in a vehicle, the only noise might be the changing gears or the friction created between the vehicle and the surface it travels over.

Another effective noise control system is simplest of all - limit power and speed of all but racing vehicles, and confine racers to designated well-controlled areas. Such limits on power and speed would contribute to the solution of a multitude of other problems. It would increase safety, including juvenile safety; cut down on the number of out of the way properties that could be invaded; make for better visibility of machine and driver and thus easier identification (in conjunction with licences); and make it possible to overtake and catch at least some trespassers.

Why, after all, should snowmobilers have an immunity from punishment not enjoyed by other potential wrongdoers? We don't ask automobile drivers to form clubs and police each other. We must make punishment at least a possibility to be considered.

#### **III OTHER PHYSICAL DANGERS**

Previous briefs have discussed some of the physical dangers to snowmobile users: danger of upset due to instability, danger of collision due to weak front light, lack of rear view mirror, defective throttle control, poor steering and braking, damage to the spine, etc. Some of these problems are being remedied or partly

remedied on the new models.

However, what about the simple danger of getting one's skull cracked open? We have put seat belts in cars and helmets on motorcyclists. There is every reason to require a helmet on the driver or rider of any vehicle which offers as little protection as those under discussion.

#### IV ECOLOGICAL EFFECTS

We do not wish to iterate here, or to overstress, the undesirable ecological effects of all-terrain vehicles. Other briefs have discussed them, and a brief from the Conservation Council will go into the problems more fully than we can.

Our greatest interest is in the ecological effect on human beings.

However, there is no question that the snowmobile can and has damaged the ecology in various ways by disturbing nesting birds, breaking young trees, compacting snow over plants and hibernating animals, and bringing large numbers of people into areas where few went before. The real question is, how much damage is done, how much will be done in the future, and how seriously do we want to take it?

We can speak of a trade-off, but that's not really what it is. Nature lovers, quiet householders, other living creatures, and our children, who must cope with any mess we make, do not get anything by this so-called trade except more rapid use of irreplaceable resources.

You have been urged to ask the government for further studies of the ecological effects of snowmobiles, especially as concerns the far north and other possibly sensitive ecological areas. We add our voice to this. But we want more than this. We want a little foresight on the part of government before another new vehicle takes over wide areas of the country, as snowmobiles have done.

#### V ECONOMIC EFFECTS

Snowmobiles especially have become big business and have spawned other lucrative industries and businesses to provide vehicle servicing, special clothing and equipment, accommodation, etc.

At the same time, there are certain diseconomies associated with their use. The Federation of Agriculture brief provided a very good discussion of fences, young forest and orchard trees, wheat, and clover destroyed. Vandalism to houses and cottages in formerly remote areas has become common. Land areas formerly suited to quiet pursuits are lost for such uses, and the same thing has happened to homes and cottages.

In permitting a whole new mode of transportation to spring up absolutely unfettered, we have allowed one section of the population, by exercising certain legitimate (and illegitimate) prerogatives, to take away formerly enjoyed rights and protections from another section of the population.

Now it is necessary to decide which of these new-found freedoms we must take back from snowmobile users etc. in an attempt to right the balance.

Other new sets of problems are coming as other innovative modes of transportation come into use. It would be best to try to foresee these before hovercraft etc. become too economically entrenched.

# VI HOVERCRAFT - THE COMING SCOURGE?

The snowmobile first became available in 1959. In 1972 a Select Committee of the Legislative Assembly of Ontario was appointed to "enquire into and report on" matters relating to their operation. In another year, or perhaps two, we can hope for legislative control of some of the problems they have caused us. Some of these problems are, noise, of course, trespass, and potential ecological damage.

Fortunately, the hovercraft, or ground effects machine, is within the terms of reference of this committee, and it is to be hoped hovercraft will not become so widespread, in so totally uncontrolled a way. For if you were attempting to design a machine to be noisy, to trespass readily, and to threaten as many ecological systems as possible - you would certainly design a hovercraft.

Arthur C. Clarke foresaw the problem in the late 1950's. In <u>Profiles of the</u> <u>Future</u> an entire chapter is dedicated to the coming of the ground effects machine, or hovercraft:

It takes some time to grasp this idea. . . that the immense networks of roads upon which two generations of mankind have spent a substantial fraction of their wealth may soon become obsolete. Traffic lanes of a sort would still be needed, of course, to keep vehicles out of residential areas and to avoid the chaos if every driver took the straightest line . . . that geography allowed. But they need no longer be paved . . . merely graded, so that they were clear of obstacles more than, say, six inches high . . . .

But there will be a very difficult transition period before the characteristic road sign of the 1990's becomes universal: NO WHEELED VEHICLES ON THIS HIGHWAY.

Since the G.E.M.'s . . . need stick to the traffic lanes only when their drivers feel like it, the chief motoring offense . . . will not be speeding, but trespass . . . .

It is too much, says Clarke, to expect that refugees from the cities, with power to move like noisy clouds over the land, will refrain from entering and exploring any spot they fancy. He predicts a second debut of barbed wire.

All other vehicles are specialized in some way. But because they have no contact with the ground, hovercraft can travel with equal ease over water, ice, snow, sand, plowed fields, swamp . . . . And at any season.

To say that the hovercraft is noisy is to make the classic understatement. Small one-man models, now available for purchase, probably give as much noise at the driver's ear as a small jet plane, for they have been measured at 109 dB(A) at

15'. At fifty feet, this would work out to perhaps 101 dB(A).

Probably the machines can be made more quiet in time. However, it should be noted that they are supported on a cushion of air (not a dushion of noise, as some have suspected) created by a powerful fan, and fan noise is notoriously difficult to control.

A cushion of air sounds soft and unthreatening to the environment. However, only about 20% of the engine's thrust is used to create the air-cushion effect. The remaining 80% provides the forward motion of the craft. The result is, quite literally, a jet of air at the rear of the vehicle capable of blowing dirt, sand, gravel, nails, crushed glass, water, nests and eggs of swamp fowl, or what have you, with terrific force.

The Canadian Environmental Law Research Foundation strongly urges that hovercraft and other novel vehicles not be permitted to operate in Ontario, or not be permitted to operate except on licensed testing areas owned or leased by companies engaged in their development, until there has been ample time and opportunity to study their appropriate use and to make such improvements in the mechanism as may be needed for noise control -- the fact that the Government of Canada already operates one or two large and even noisier hovercraft in the north notwithstanding.

#### VII TRESPASS AND HARASSMENT

Control of trespass involves several overlapping problems: law and interpretation of the law, penalties, identification of the offender, adequate patrol and enforcement.

Some would put education at the beginning of this list. We are very much in favour of education as a means of arriving at consideration of the rights of others and obedience to the law. However, the effectiveness of an educational campaign

is unpredictable and varying. The educative effect of law that is both enforceable and known to be enforced is quite marked.

At the risk of being thought cynics, we would prefer to depend on education only to obtain certain of those benefits which might accrue to the persons being educated - proper maintenance and safe use of their machines, for instance. For the protection of the rights of the general public to peaceable enjoyment of private property and of such of the public lands as may be set aside for the purpose, we want careful regulation of the use of recreational vehicles.

Trespass, at least in southern Ontario, does not usually result from ignorance as to whether land is private. Most land here is known to be privately held. When a group of snowmobilers cut fences, enter farms at night, drive several times around each farm house, whooping and hollering, and repeat this behaviour many times over a winter, it can only be because they feel absolutely safe from interference by the law.

#### The Common Law Right to Freedom from Noise and Trespass

Common law rights, which have been in existence for hundreds of years, provide that persons owning or renting property are entitled to the quiet enjoyment of their property (freedom from nuisance) and to freedom from trespass on their property.

In other words, it is very clear law, for which remedies are provided, that it is illegal for one person to come upon another person's property without the latter person's consent. Further, it is unlawful for one person to disturb another in the enjoyment of his property, whether the interference is direct (as in the case of physical trespass) or indirect (as in the case of noise).

The common law provides two remedies.

The first remedy is damages, that is, compensation for the harm caused to the property owner (or tenant) by interference with the enjoyment of his property.

The second is an injunction, which is a court order to prohibit repetition of the conduct which is unlawful.

The problem is that it is a cumbersome process to put the civil court system, where these remedies may be obtained, into action.

#### The Petty Trespass Act

In an attempt to overcome some of the difficulties of enforcing common law rights, the Ontario legislature enacted The Petty Trespass Act. This act goes back to pre-Confederation days.

Unfortunately, The Petty Trespass Act has not been amended significantly in over one hundred years, and it is as out of date as the common law concepts of nuisance and trespass when it comes to dealing with snowmobiles.

There are five basic problems preventing The Petty Trespass Act from being an effective tool in controlling snowmobiles.

(1) Definition of a Trespasser: The present act makes anyone a trespasser who goes onto enclosed (fenced) land or land well posted with no trespassing signs.

Assuming a snowmobiler is charged with trespass, an easy defence is to claim (a) if there was a fence, it was cut or broken or so covered with snow he didn't see it; or (b) if there were signs, they blended in with the snow, had fallen down, were too small, etc.

Further, with regard to unfenced and unmarked lands, a person has a right to go

on such lands until he is told by the owner to leave, and then the person has a reasonable time in which to leave.

To get over these obvious excuses, the act should be amended to provide that any snowmobiler found on private or public land (except that specifically marked by official signs with numbers assigned by the Ministry of Transport or of Natural Resources) is <u>ipso facto</u> a trespasser. The only defence would be to have the owner of the land appear in court to swear under oath that the snowmobile was there with his permission.

The reasons for numbering signs are (a) to prevent counterfeit signs and (b) to prevent a snowmobiler from saying that the land was marked for snowmobiling when, in fact, it was not. The snowmobiler would have to record the number of the sign, or remember it, and be able to quote it in court.

(2) <u>Proof of Trespass by a Given Machine</u>: Legislation (licensing) must require snowmobiles to carry identification which can be read from a distance so a trespassing machine can be identified.

It has been suggested that licence numbers imprinted on the track would be a solution. Certainly, the track is frequently clearly visible the morning following a trespass. Apparently it is not known whether such marking would be possible. It should not take forever to find out.

In the meantime, the province should not postpone licensing of all snowmobiles. Each vehicle should carry its number, in luminous letters, several inches high, in at least two places on the machine. The best positioning for licence plates might be front and rear, or it might be on the sides. Again, it should not take long to find out. Perhaps they would show up better if painted on the driver.

(3) <u>Liability of Owner for Trespass</u>: As The Petty Trespass Act is now worded, although it does make the owner of a motor vehicle liable for the trespasses of the driver, it does not contain a definition of "motor vehicle". The Act must be amended to make it clear that "motor vehicle", for the purposes of the Act, includes snowmobiles and other like machines.

(4) <u>Realistic Penalties and Compensation</u>: The penalties allowed under The Petty Trespass Act range from a minimum of \$10 to a maximum of \$100. Since magistrates and Justices of the Peace seldom give a maximum sentence and often give a suspended sentence (illegally when a minimum fine is prescribed), it is necessary, in order to make the sanction against trespass meaningful in today's economic terms, to have a minimum \$50 fine for trespass by snowmobile, and a maximum \$500. There must also be a provision whereby a magistrate can order the owner of the machine to repair or pay for any damage caused by trespass (broken fences, shrubs, etc.), and a further provision whereby the permit for the machine can be suspended.

(5) <u>Venue</u>: Another problem involved in effective enforcement of The Petty Trespass Act is that, according to the usual rules of criminal procedure, the charge of trespass must be laid and the trial held in the locality where the trespass took place. More flexibility, similar to that found in the Highway Traffic Act, must be provided so a charge can be brought anywhere in Ontario, where the owner of the property lives or carries on business, or where the owner of the snowmobile resides. The land owner should not be forced to come to the area where the trespass occurred to testify if that is not his usual home.

Further, the government should inform private citizens of their right to bring charges under The Petty Trespass Act, and show them how simply it can be done and that they need not have a lawyer. In addition, Crown Attorneys should be instructed to vigorously prosecute charges of trespass brought by private citizens against snowmobilers.

# Night Curfew - By-Laws

Municipalities (cities, towns, villages, townships, etc.) have the power to pass by-laws prohibiting snowmobile use on certain lands (Planning Act, R.S.O. 1970, C. 349, s. 35(1) (1) ). They also have the power to ban their use at certain times or in certain areas under a noise by-law (Municipal Act, R.S.O. 1970, C. 284, s. 354, para. 118). They have the power (para. 107) to pass by-laws with respect to use of roads under municipal control.

Where trespass and harassment by snowmobile have been sufficiently grievous, the curfew could be made to include all hours between sunset and sunrise - until such time as identification and control by other means become less difficult.

When breach of a municipal by-law occurs, any ratepayer may initiate a private prosecution or seek an injunction.

#### Policing

Each office of the OPP has two snowmobiles. Some offices have as many as 10,000 square miles to police. On any given night, telephoned complaints about snowmobile activity can be so numerous, from so many areas, that it is physically impossible even to visit each area, let alone maintain any sort of routine patrol.

Clearly, police equipment must be more nearly commensurate with need if control is to be exercised.

## Enforcement

It weakens order and respect to create statutes where intention to enforce is lacking. The present provisions of The Highway Traffic Act, sec. 49 (1) (3)

concerning mufflers and noise are badly enforced. The number of convictions has been declining, while the number of noisy mufflers on motorcycles, automobiles, and trucks continues to increase. These vehicles, too, disturb people in their homes and recreational areas. Enforcement should be tightened.

#### Controls on Speed and Power

We have suggested, in the interests of safety, that vehicles to be licensed for general recreational use (as opposed to rescue, racing, trapping) might be required to fall within certain limits for speed and power. In the absence of other effective means of control, this may be a possible way to limit the roaming area and ease of escape of miscreants.

#### Summary

The Canadian Environmental Law Research Foundation is concerned with improving the law as it affects environmental problems, and with better enforcement of such law. We draw upon medical, scientific, and technical information, as well as legal and general public opinion, in attempting to find solutions to problems.

Noise, and especially vehicle noise, is a matter of serious public concern, as has been demonstrated in these hearings. Noise and its hazards need to be better understood and to have better statutory controls.

The snowmobile epitomizes these problems of noise. It has other ecological effects which are not fully understood. The economics and deseconomies of permitting the totally uncontrolled spread of novel forms of transportation and motorized recreation are not widely understood.

Newer vehicles, such as the hovercraft, are almost upon us. We should not wait until they are a widespread, well established fact, with a broad economic base, before studying the need for and creating controls for future vehicles.

Our legal and general recommendations complete this brief.

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# VIII RECOMMENDATIONS - LEGAL

The Petty Trespass Acc, R.S.O. 1970, C. 347.

1. That so 1(1) (c) be repealed and the following substituted:

1(1)(c) with respect to which notice has been given by word of mouth, or in writing, or by posters or signboards so placed as to be visible from each point of regularly used road or foot access, not to trespass, unless the person who unlawfully enters or in any other way trespasses, proves beyond reasonable doubt that he did not receive such notice.

2. That a new paragraph (d) be added to s. 1(1):

l(1)(d) by means of a motorized snow vehicle, unless he proves beyond reasonable doubt that he had notice by means of an officially numbered signboard of a designated type, expressly permitting use of snowmobiles on that land . . . (etc.)

3. That s. 1(1) be amended, as to penalties, to read:

1(1) . . . is liable to a fine of not less than \$50 and not more than \$500; and is liable to pay all damages to real and personal property occasioned by the trespass to the owner of the property so damaged, which amount shall be assessed at the hearing of the charge; and is liable to have his motorized snow vehicle permit removed for any period up to 6 months.

4. That s. 1(2) of the Act be amended by adding the following subsection:

1(2) For the purposes of this Act, "motor vehicle" shall be deemed to include a motorized snow vehicle as defined by The Motorized Snow Vehicles Act, R.S.O. 1970, C. 283, s. 1(d).

The Motorized Snow Vehicles Act, R.S.O. 1970, C. 283.

- 5. That all motorized snow vehicles be licensed by the Department of Transportation as permitted under s. 2(1) of this Act.
- 6. That the regulations under s. 12(b) of this Act be applied to require the continued use and maintenance of such equipment as will enable motorized snow vehicles to meet the applicable federal noise regulation.

The Highway Traffic Act, R.S.O. 1970, C. 202.

7. That s. 62(1) be repealed and the following substituted:

62(1) No person shall ride on or operate a motorcycle or motorized snow vehicle on a highway unless he is wearing a helmet that complies with the regulations.

8. That the Lieutenant Governor in Council make regulations providing for the identification and marking of such helmets, as provided for in s. 62(2) (b).

# IX RECOMMENDATIONS - GENERAL

- That the Government of Ontario urge the Government of Canada to lower its (manufacturing) noise limit on snowmobiles more rapidly than is presently intended.
- 2. That the Government of Ontario provide for the equipment of the Ontario Provincial Police and other enforcement authorities (i.e., snowmobiles and sound level meters) such that they are properly and sufficiently equipped to enforce all current and new legislation on (a) trespass and (b) snowmobile noise.
- 3. That the Government of Ontairo, through the Minister of Transportation, inform the OPP and other law enforcement authorities of its wish to have s. 49(1) and s. 49(3) of The Highway Traffic Act strictly enforced.
- 4. That the Government of Ontario seriously consider putting stringent limits on the use of hovercraft and other novel recreation and transportation vehicles, until such time as the Government has sufficient knowledge of their probable ecological effects to determine their proper use and control, and has equipped enforcement authorities for such control.
- 5. That the Government of ONtario instigate and encourage needed research to determine the long term ecological effects of (a) snowmobiles, (b) hovercraft, and (c) any other proposed motorized vehicle for recreation or transportation.
- 6. That Crown Attorneys be instructed to vigorously prosecute charges of trespass brought by citizens.
- 7. That the Government of Ontario instigate, encourage, and cooperate with efforts to educate the general public and the snowmobiling public concerning (a) noise,

(b) noise-induced hearing damage, (c) snowmobiling manners and responsibilities,

(d) the law and citizens' rights, and (e) snowmobiling safety.

# 8. That municipalities use their by-law powers to control snowmobile use areas and hours of use, to suit local conditions.