



Manitoulin Streams' Winter Deer Save Initiative

In the creation of this program in 2011, one of MASC's (now Manitoulin Streams) many goals was to encourage more extensive community involvement in the sustainable management of this area's white-tailed deer population. To endure harsh winter conditions, deer typically migrate from their summer/fall ranges to winter concentration areas, termed as "deer yards", which have suitable cover and food that will help to sustain them. These adaptations and good winter habitat enable deer to survive most winters, but under heavy snow conditions it may be necessary to pack-down deer trails and provide emergency feeding. These actions will help prevent massive die-offs and maintain core deer populations.

To avert this risk, MASC and other Manitoulin organizations had partnered to initiate the "Deer Save" project; to plan and coordinate preparedness for emergency winter deer situations. Landowners were contacted if they have property that falls within an important winter deer yard. Our organization is seeking permission to access the deer yards by entering landowner's properties, should emergency winter conditions arise. Landowners are being asked to grant us permission to enter their property by signing and returning a landowner permission form and are being provided with a Deer Wintering Fact Sheet to inform them on what they can do to protect and enhance deer habitat.



MANITOULIN DEER SAVE PROGRAM – LANDOWNER PERMISSION FORM

Name:	Phone:
Address:	Email:

In exchange for the landowner granting permission to the Council to enter the landowners property the Council hereby indemnifies and saves harmless the landowner from any and all liability for personal injury to any council member or third party designate or damage to equipment that results from their activities on the landowners property.

I hereby grant consent for the organized community partnership of Deer Save volunteers to conduct emergency deer yard work on my property during the winter, effective January 1, 2011.

I give consent for emergency deer yard work on my property for a period of *(please check one)*:

_____ Indefinitely _____ 5 years _____ 1 year

Lot #	Concession #	Township	Area (hectares)	Area (acres)

The specific types of management techniques which I will permit include:

_____ trail breaking _____ browse cutting _____ emergency feeding

Signature of landowner

date

Deer Wintering Area Fact Sheet

White-tailed deer on Manitoulin Island are a valuable resource economically, recreationally and aesthetically, but increases in forest harvesting, agriculture and urbanization have had profound effects on deer populations; wildlife habitats have been altered by increased rates of deforestation in important deer wintering areas. Poor quality of wintering areas is considered a limiting factor on the health of a deer population. Deer primarily migrate to wintering areas in response to snow depths greater than 19 cm. Depths of 50 cm or greater are considered very restrictive to deer and good quality winter deer yard habitat is key to their winter survival. Thus, if habitat quality in these areas is threatened by forestry operations, land clearing, overpopulation, or poor browse growth, good land use management procedures are required.

The following management practices for deer wintering areas, or deer yards and the recommendations below can produce an acceptable balance between quality deer habitat and the needs of private land owners.

Background Information

In this area, white-tailed deer tend to congregate, or yard, in large, high density groups during winter. This is thought to be a response to maximize browse availability, evade predators, or lessen energetic costs associated with moving through deep snow and/or thermoregulation in low temperatures.

Deer yards tend to occur frequently in areas dominated by cedar and other conifer species or on south-facing slopes which provide shelter from the prevailing wind, and offer maximum exposure to the sun. Yards can generally be described as irregular, mature or mixed softwood stands which offer cover, as well as access to acceptable browse. Deer seem to prefer yards at low elevations (since highlands are colder, have longer winters and receive more snow), seek sites with large over story trees, abundant under story growth, proximity to high softwood canopy, absence of a second story beneath the main canopy, and show an avoidance of north-facing slopes.

The three most important features of a successful deer yard as: a) traditional use, b) sufficient softwood cover and c) sufficient browse.

Traditional use refers to the fact that deer display fidelity to both their winter and summer habitat. It is thought that this is a learned social behaviour, because fawns tend to mimic the movement patterns of their mothers. Deer fawns accompany their mothers on their first journey to and from winter yards and this establishes a pattern of migration that is often carried through a lineage and passed to successive generations. Thus, elimination of a traditional yard may have serious detrimental effects on deer accustomed to migrating to a particular area.

Softwood conifer cover is a particularly important feature of deer yards, as it forms a canopy which limits the amount of snow accumulating on the forest floor, and also acts as a windbreak and thermal insulator. Deer tend to prefer softwood cover species such as eastern white cedar,

hemlock, white pine, and balsam fir in wintering areas. Pure softwood stands, while providing good shelter, are usually deficient in available browse, and are primarily selected when snow depths are restrictive (>50cm) or weather is severe. Mixed wood stands, on the other hand, offer acceptable amounts of cover, as well as a greater abundance of browse, and are usually selected when snow depths are moderate (20 cm). In areas where snow and/or temperature are not limiting factors, selection is based proportionately less on cover type and more on the presence of abundant, high quality browse.

Deer are primarily generalist foragers, but are often discriminatory with regard to the species of browse consumed. A list preferred winter deer browse species includes hardwoods such as; maple, aspen, hazel, ash and red oak. Mast crops such as acorns, beechnuts, and berries are also important for deer. In severe winters, when snow depths restrict mobility and access to food, competition for browse can be extreme. This is exacerbated if the deer yard is of poor quality or deer population density is high. In these situations, deer will feed on lower quality browse, and arising nutritional stresses can negatively impact the survival, health, and reproductive success of the animals.

Deer Wintering Area Management Guidelines

- i) Whenever possible, areas defined as deer yards should be spared from intensive forest harvest operations. When harvesting is unavoidable, selective cutting is preferable to large-scale clear cutting.
- ii) Where forest harvesting is to be carried out in an area which is identified as containing a deer wintering yard:
 - a) In areas which experience harsh winters at least 50% of existing conifer cover within the yard should be retained in uncut shelter patches. Each patch should have a minimum area of 10 hectares (ha) (24.7 acres), a minimum width of 300 m and contain a mixture of age classes and species. Conifer height in each patch should be 10 m or higher, average conifer diameter (measured at 4 feet above ground) should be a minimum of 18 cm, and tree crown canopy closure should be kept between 60% and 80%.
 - b) Shelter patches should not be isolated. Instead, they should be attached to other uncut areas by travel lanes. Travel lanes should have a minimum width between 50 m and 90 m, and crown closure of at least 50%. Travel lanes should follow watercourses (when present) or established travel routes that are sheltered from wind flow.
 - c) Individual openings within a deer yard should be no larger than 10 ha, as cuts larger than this can potentially damage the integrity of the wintering area. Openings should be shaped irregularly to maximize forest edge for deer, and be separated by shelter patches of at least equal size.
 - d) Forests should be managed to maximize browse quality and availability in the yard, while maintaining the necessary levels of crown closure. It is also recommend that browse plots of 0.5 to 2 ha in size be scattered throughout the yard to ensure that acceptable browse species are accessible to deer within 30 m of conifer cover.

e) Cutting should be scheduled for the fall or early winter to provide large amounts of easily accessible browse for deer.

iii) Deer wintering areas are dynamic and should not be managed as though they are fixed in time and space. Like any forested area, a number of factors (such as temperature, precipitation, and winter severity) can change from year to year within a deer yard, and affect the composition and distribution of the resident flora and fauna, as well as the physical environment itself (forest blow-downs, for example). Thus, land owners should be aware of the effects of these environmental factors on deer, and take them into consideration when deciding upon actions to be implemented within deer wintering areas.

iv) Stands within a yard which are dead, diseased, or have suffered extensive insect or weather damage should be cut before healthy stands, as they would offer substantially less cover for wintering deer and run a greater risk of forest blow-down.

v) When felling trees within a yard, care should be taken to minimize damage to timber that is intended to be left standing. Such damage could include uprooting, trunk or branch breakage, or large tears in bark caused by falling trees.

vi) When harvesting within a yard, an awareness of other logging operations in the area is necessary. For example, if other large forest harvest operations have occurred in the vicinity of a deer yard, then cutting within the yard should be minimized or restricted.

vii) In addition to wintering area management, creating openings in summer range habitat is recommended, as this will promote browse regeneration and improve deer's physical condition entering winter.

Cutting to promote autumn mast species such as oak or beech by removing competing trees so that mast trees will receive increased sunlight and nutrients could also improve the overall range quality for deer in good acorn and nut production years.

Important Notice to Manitoulin Island Landowners Re: “Winter Deer Save Program”



The **Manitoulin Area Stewardship Council (MASC)** had partnered with other Manitoulin organizations to coordinate preparedness for any future emergency winter deer situations that may arise on Manitoulin Island via our “Winter Deer Save Program”. ***But, to be successful in helping Manitoulin Island deer to survive any future severe winters, we need your help now!***

If you own property that falls within an important winter deer yard area (see map on back of this page). We are seeking your permission to access your property in preparedness for the future should severe winter deer yard conditions arise in order to effectively coordinate and carry out emergency deer yard work. Landowner permission given in advance of potentially severe winters will eliminate any delays that may result from work involved in seeking permission after the fact. And will allow community partner organizations to react more rapidly to severe winter’s conditions and thus potentially saving more deer.

To survive winter conditions, deer typically migrate to winter concentration areas, termed as “deer yards”, which have suitable cover and food that will help maintain them through most winters. But under very heavy snow conditions it may be necessary to help them out by packing trails so deer can move about to find food on their own and in extremely harsh winters emergency action may include organized deer feeding in significant concentration areas. These actions if carried out can help prevent massive die-offs thereby maintaining the core deer populations needed to rebuild the herd.

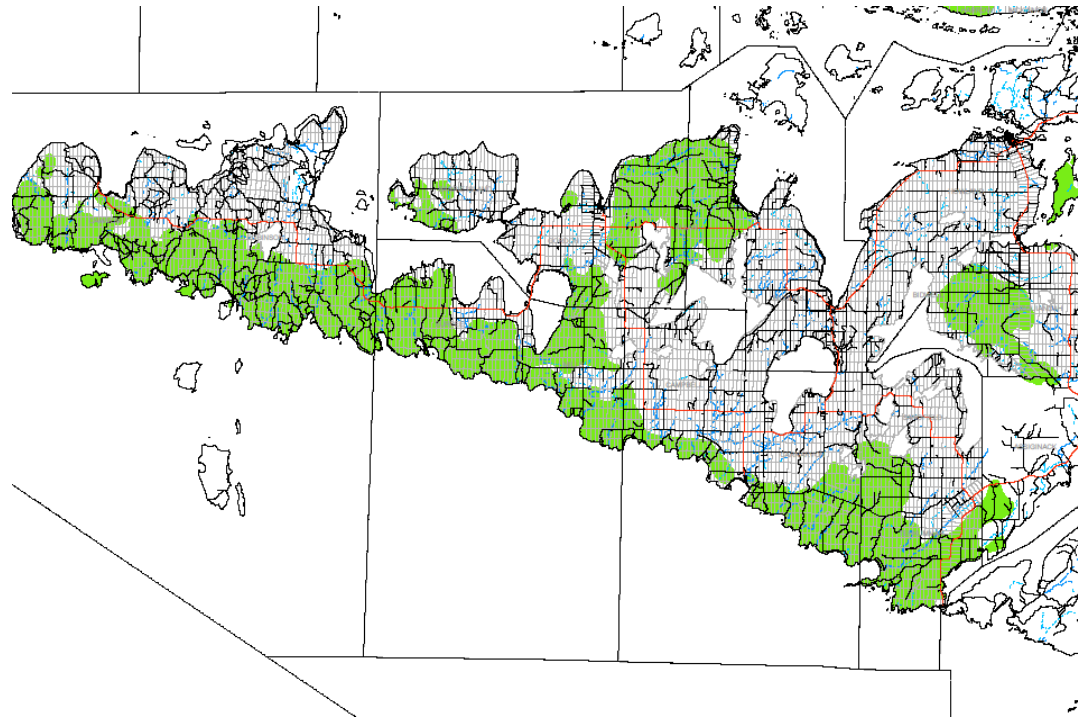
You can help by giving our partner group permission to access your lands. To give us your permission please access our **Winter Deer Save Program - Landowner Permission** form via our Manitoulin Streams website at www.manitoulinstreams.com , complete, sign and return the form to the address noted on it. Our website also provides important information regarding land management practices that will benefit our deer and other wildlife. Rest assured, should we need to access your property for any Winter Deer Save Program work, all of our volunteers will have suitable liability insurance coverage. ***Update, OFAH now covers our members and volunteers up to 5 million dollars!

The **Manitoulin Area Stewardship Council (MASC) now amalgamated with Manitoulin Streams** is a diverse, volunteer, community-based stewardship organization focused on promoting the sustainable management of the natural resources within the Manitoulin area. One of MASC's many goals has been to encourage more public involvement in the management of this area's white-tailed deer population.

For more information on this **Winter Deer Save Program** please see information on our Manitoulin Streams web site at www.manitoulinstreams.com or contact Sue Meert the Deer Save Coordinator at (705) 859-1653 or via email to suemeert@hotmail.com

Manitoulin Island Winter Deer Yard Areas (important winter deer yards are highlighted in darker green on map)

“Winter Deer Save Program - Landowner Permission” is requested for access to lands for the carrying out of potential future emergency winter deer yard work within the identified winter deer yard areas



Manitoulin Winter Deer Yard Areas (important winter deer yards highlighted in darker green on map)