

Moose - Christmas Tree Grower Conflicts

Overview

The moose population of Newfoundland and Labrador is estimated to be 150,000 animals. The island population originated from a set of introductions that occurred in 1878 and in 1904, when three pairs of moose were released. Since then, moose have distributed themselves throughout the Island and today moose contribute cultural, social, and economic benefits. Many hunters consider this animal as the ultimate game species supporting an ever growing demand for resident and non-resident hunting opportunities. In contrast, not all consequences of this introduction have been beneficial, especially to the fruit, vegetable, and more recently, Christmas tree growers of the province.

Moose, having a relatively low nutrient diet, must consume 15-20 kilograms of food to meet their daily needs. In winter, this food consists mainly of deciduous tree shoots and balsam fir. Summertime diet includes deciduous shoots and leaves, aquatic vegetation, and shrubs. Moose have a natural tendency to select the highest quality of available foods. Where fruit, vegetable, or enriched high quality balsam fir plantations are available, moose will be attracted to these locations. These conflicts are predictable and will surely occur without proper deterrent considerations.

Conflict Overview

Damages caused by moose can have a serious negative impact on the economic operations of some farms. Assistance has been provided to some farmers, primarily vegetable farmers, to remove problem moose. The timing of moose/vegetable farm problems (mainly a late summer/fall occurrence) lends itself to the direction of licensed hunters to take possession of any animal that may have been destroyed during this process.

Christmas tree growers also have serious problems with browsing moose. Balsam fir, the tree of choice for most growers, is also one of the preferred food species for moose. Conflicts may be especially severe when operations are established in existing moose habitats that would normally contribute to the annual food supply for local moose. Furthermore, enrichment activities such as pruning and fertilizing make treated sites especially attractive. This problem is most severe in winter and early spring when alternate food species are unavailable. Some Christmas tree growers have requested to be included with the moose removal program currently provided to vegetable farm operations. However, Christmas tree operations differ from vegetable farms in that they require year - round protection from moose feeding activity. Efforts to remove problem moose under these circumstances have the potential to be very formidable and demanding on localized moose populations. In addition, the timing of most conflicts tends to occur in the later stages of pregnancy or when females have young calves. Destroying problem animals under such circumstances is not acceptable. Christmas tree growers must assess the likelihood of problems and determine mitigative measures for these conflicts in the initial economic evaluation of their operation. Suggestions are outlined in the following paragraphs.

Preventative Measures

To avoid moose-Christmas tree farm conflicts, a variety of factors should be considered. These factors include the following:

- **Level of Human Activity**

Generally, moose will be displaced or at least reduced in high human activity areas, such as near communities. Wherever possible, Christmas tree farms should be concentrated near these locations. This is also an important consideration for effective monitoring of the site after it has been established.

- **Moose Occupancy**

When selecting a site, individuals should assess the present and historical occupancy of the area by moose. This should include both the summer and winter distribution patterns. Where winter moose yards are present or summer sightings are common, the site should not be considered.

- **Dominant Forest Type Surrounding the Site**

An assessment of the dominant forest type surrounding the site should be completed. Avoid placing a balsam

fir plantation in a black spruce dominated forest. Moose will not eat black spruce. Small balsam fir sites within an area dominated by spruce tend to receive extreme browsing pressure.

- **Control Measures**

Precautionary measures meant to avoid conflicts with moose may not always be successful. This is especially true for operators in high density moose areas. Where these conflicts threaten the economic viability of the operation, or as a means to avoid such conflicts from the onset, certain control measures may be initiated. These measures include:

- **Fencing**

Fencing is the most reliable measure to prevent moose browsing. Types of fencing include a wooden rail systems, electric fences, barb wire fences, etc. Christmas tree operators, with assistance from the local Agricultural Representative and/or Development Officer, should assess the feasibility of this option.

- **Scare Devices**

The most effective scare devices include propane cannons, radios, and other alarm devices. These devices are effective only in the short term. Once moose become accustomed to the noise produced by these methods, other options will need to be pursued as alternate measures in order to re-establish unfamiliarity with scare devices.

- **Hunter Solicitation/Cooperation**

As a means to reduce local moose numbers in proximity to the operation, farmers should record the time, dates, location, numbers, etc. of moose seen. This information collected over time will often indicate a predictable pattern. This information could be provided to licensed hunters, whose success will benefit both the hunter and the farmer. Permits to destroy problem moose on Christmas tree operations will not be issued.

Contacts

Questions on this and other related topics can be addressed by contacting your local Agricultural Representative, Development Officer, or Wildlife Biologist.