



The browse was then examined on a regular basis (daily for the first week, and weekly after that) to determine the number of twigs browsed. In the soap treatments, the intent was to record browsing relative to distance from the soap, in order to determine what spacing of soap repellents might be needed to completely protect a plant.

The first day after treatments, I observed that at least some of the lower branches (within 10 - 12 inches of the snow) of all shrubs were at least partially browsed by hare. Most twigs available to hare had been browsed by the end of the first week. During the same time, however, no browsing by moose was observed. In fact, no fresh moose tracks were found in the vicinity, although moose had heavily browsed regrowth along an adjacent air strip a month earlier.

At some time during the fifth week, moose returned to the area and browsed all available twigs in all treatments. Twigs were consumed up to approximately 5/16 inches diameter. Twigs of this diameter which had soap suspended from them were also consumed, and the bag of soap was dropped to the snow near where it had hung. As a result of the complete and apparently simultaneous browsing of all treatments, no statistical comparisons were made.

Obviously, the treatments were not effective in deterring browsing by moose. They may be effective under other conditions where alternative foods are more readily available, where the moose are not as nutritionally stressed, or where the treated plant species is of lower palatability. However, the assumed purpose of any repellent application is to protect the plant for the entire season of susceptibility, regardless of the species or setting.

It should also be noted that even in cases of low plant palatability, relative uniqueness within a given setting may elicit a much stronger preference response by the browser than if the plant were common. This phenomenon has been called the "monotony factor", and it is well documented for a variety of generalist herbivores, particularly in the places or seasons where/when the variety of forage species available to the animal is restricted. While many of the shrubs and trees commonly used for landscaping may not be particularly palatable, as a result of some type of innate protection, they may still be susceptible to browsing damage simply because they represent a stimulating change in "menu". Many other cultivated species are not defended by structure or secondary compounds and are extremely palatable to moose from the outset.

Of the four treatments, BGR required the most frequent reapplication (every 2 months according to the manufacturer). Even though the interval between applications in this experiment did not exceed the manufacturer's recommendations, it cannot be assumed that more frequent application would not have been more effective at preventing browsing. However, it should also be

realized that the duration of freezing conditions within this climatic region may preclude more frequent or timely applications of sprayed repellents.

References:

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