Moose

By Dr. Vince Crichton

Moose are generally confined to eight broad habitat sections in Manitoba. Each possesses different capabilities for production of, sustaining and increasing moose populations. Moose distribution is more ubiquitous in central Manitoba than the south and far north. In habitat such as the Hudson Bay Lowland and portions of the northern boreal forests, moose are generally confined to riparian (adjacent to water areas) habitat. In the south, they are found in islands of habitat outside of the aforementioned habitat sections and are occasionally found in small numbers where suitable habitat exists adjacent to agricultural land.

Populations were at comparatively high numbers in the 60's which resulted from a predator control program and excellent habitat created after the major fires of the early 60's. The late 70's and early 80's saw a drop in populations and it would appear that it bottomed out at around 21,000 animals. Although good population data are not available, an estimate of the total provincial population today would be 25,000-30,000. This is still below that which the existing habitat can sustain. A reasonable target population to shoot for should be 40,000.

The requirements essential to maintaining moose as an integral component of Manitoba's ecosystems, whether it be in the north or on the agricultural fringes in the south are as follows: early seral stages of plant succession seen following disturbances such as fire, logging or insect damage (moose populations can be expected to increase following such events provided mortality is not enhanced); semi-mature stands of mixed forests or hardwoods which offers suitable thermal cover, protection from deep snows and protection from predators; aquatic areas which provide essential emergent and submergent vegetation during the summer period; natural mineral licks which provide dietary essentials; cool secluded sites offering thermal cover during the summer period; and, appropriate calving sites such as islands in lakes, rivers and bogs offering seclusion or easy escape from predators. The best and most ideal moose habitat offers copious amounts of food items and adequate cover in close proximity to one another negating the need for extensive movements to acquire these essential items in all seasons of the year.

How big are moose? Is the 2000 pound moose fact or fiction? It is fiction but not by much. Bulls weighing 1600 pounds have been taken in December following the rigors of the rut so it is not inconceivable that some bulls in prime condition i.e. immediately pre rut, could exceed 1800 pounds. The average weight of bulls removed from Hecla Island during the hunting seasons of the late 70's and early 80's was 923 pounds and 849 for cows.

Moose have comparatively small home ranges, however during the rut there is an increase in size of the range used especially by bulls as they move about seeking receptive cows.

The primary causes of moose mortality are predation, hunting (controlled and uncontrolled) and disease in certain areas of the province which would include brainworm and winter tick in certain years. Relative to predation, it has long been known that wolves kill moose but research in the late 70's and early 80's in other jurisdictions has shown that black bears are a major mortality factor on calves during their first 6-8 weeks of life. Up to 80% of the annual calf crop can be taken by bears.

The breeding season for moose in Manitoba occurs during late September and early October. The average breeding date is September 29 with the median being September 26. Ninety-three precent of the cows are bred by October 12 and the peak of calving is about May 20. The earliest records of conception in cows is August 21 and breeding has occurred as late as November 22.

A major threat to moose populations is increased access into formerly inaccessible populations for things such as timber extraction. Logging is a two edged sword in that removal of the mature timber creates excellent browse conditions yet the increased access can result in the residual populations which are required to take advantage of the new browse being decimated by hunting. Thus, there is a need to control access to ensure such populations can survive and expand.

The key to managing moose populations is the protection of key habitats, control of all hunting, determination of population objectives and how these will be attained.