



## **White-tailed Deer (*Odocoileus virginianus*)**

In Manitoba, white-tailed deer are not a native species. From its original home range south of the international border, it has migrated northward. The earliest account of white-tailed deer in Manitoba was in 1881 along the Red River close to the international border. Information was based on historic records, including firsthand knowledge from Indigenous peoples, explorers, traders, government surveyors and settlers. Historic provincial population estimates have been as high as 200,000 animals in 1996 and as low as 60,000 animals in 1974. The optimal provincial population estimate is between 150,000 to 160,000 animals.

### **Description**

Adults and yearlings change their coats twice annually, in the spring and in the fall. The spring coat is a reddish-brown colour and is shorter and less dense. In the fall, the winter hair grows up through the summer hair to form a grayish-brown coat that becomes much thicker and well insulated. At birth, a fawn's pelage is a rust-coloured with white spots to blend in with their environment. Fawns shed their spotted coat three to four months later.

Weight??

### **Biology**

White-tailed deer are polygamous and breeding occurs during the rut, which occurs from mid-October, peaking around mid-November and ending early December. During the rut, mature bucks actively search for does, establishing territories by scent markings activities, rubs, scrapes, urine marking, and scent release, and assess fighting ability of other bucks.

Gestation of white-tailed deer does is 187 - 222 days with the majority of births occurring in May and early June. Under good range conditions following a moderate winter, most adult does will bear twins. Occasionally triplets are born to older deer. Following birth does immediately clean the fawn removing any trace of scent that could attract predators. Twins and triplets are separated and are maintained at different locations. During this period, fawns are solitary and the doe visits them for short periods at irregular hours during a 24-hour period to nurse and clean. For the first few days after birth, fawns nurse two or three times a day. In the first few weeks, a fawn is completely dependent on doe's milk and the antibodies the milk provides to keep it well nourished. Fawns usually double their birth weight in about two weeks and triple it within a month. On average, they gain 0.2 kilogram per day. By the fawns second week, a doe will initiate weaning by terminating the second and third nursing sessions

and fawns start to ruminate and are essentially dependent on rumination by eight weeks. Fawns will continue to nurse occasionally during the first autumn, but by 10 weeks they are functionally weaned.

### **Habitat and Range**

In Manitoba, the majority of the white-tailed deer habitat is comprised of agricultural lands, northern boreal forest, aspen parkland, bur and savannah oak, grassland and eastern deciduous forest. Important tree species include trembling aspen (*Populus tremuloides*), balsam poplar (*Poplar balsamifera*), white birch (*Betula papyrifera*), white spruce (*Picea glauca*), black spruce (*Picea mariana*), bur oak (*Quercus macrocarpa*) and balsam fir (*Abies balsamea*) jack pine (*Pinus banksiana*) and tamarack (*Larix laricina*). A range of factors have influenced white-tailed deer habitat including environmental change, fire disturbance, herbivory and human activity.

Habitat provides populations with basic essentials of survival: food, water, cover, space and security. The availability and distribution of food, water, cover, space and security determine the number of white-tailed deer an area can support. Habitat is fundamental in producing and sustaining deer populations.

### **Management**

White-tailed deer are at the northern limit of their range and occasionally are susceptible to severe winters, which cause significant winter mortality. The province uses a winter severity index to monitor the effects of winter severity. Winter severity is influenced by temperature and snow depth, which can effect deer movements, access to quality food and increase energy stress. Survival of white-tailed deer is related to the condition of the animal entering winter. These factors are amplified in severe winter conditions. Young deer and older bucks with depleted or exhausted fat reserves are most vulnerable to winter-mortality. During mild winters, mortality losses are approximately five per cent, normal winter losses range from 15 to 20 per cent and moderate to severe condition winter losses range from 30 to 40 per cent of a population. Continued monitoring and adaptive management practices by provincial wildlife biologists ensure that white-tailed deer meet the demand of licenced and rights-based hunters.

