Roadside Ground Survey of White-tailed Deer

From October 20th to 29th, 2023, a 10-day roadside ground survey of deer was conducted in Town of Yarmouth when deer are generally most active at dawn and dusk. Deer were observed daily while driving a predetermined route along 20 km of road within 90 min after sunrise and the same 20 kilometres within 90 min before sunset. A total of 19 survey runs were completed with a total observation time of 22 hours. For each sighting, 2–3 trained volunteers recorded the sex, age, location and behaviour of deer. Due to the fact that roads are not located randomly across the landscape, the roadside survey route included all habitats likely to be used by deer and representative of most neighbourhoods in the Town.

- During morning surveys, the number of deer sighted ranged between 11 and 46 deer.
- During evening surveys, sightings ranged between 34 and 79 deer.
- Highest number counted on any survey was 79 deer on the evening of October 22.
- The predominant deer behaviour was feeding and grazing regardless of time of day.

Relative trends of Deer Abundance

It’s important to note that the actual abundance or total number of deer in an area cannot be calculated from a roadside survey. However, using the recorded deer sightings, relative trends of deer abundance can be estimated.

Relative abundance is shown as a “Deer Sighting Rate” – the rate at which deer are observed along the same 20-kilometre route surveyed each morning and each evening over 10 days. Simply calculated, it is the number of deer sighted during any given survey run divided by the total length of the survey route (20 km). Relative abundance gives us a starting point to be used for comparisons and can be helpful to determine deer management goals and to evaluate the effectiveness of management efforts.

The sex in the fawn/juvenile age class could not be reliably determined and the sex of approximately 13% of the adult deer observed could not be identified due to poor visibility of the animal.



