

# Aerial Surveys for White-tailed Deer In Short Hills Provincial Park

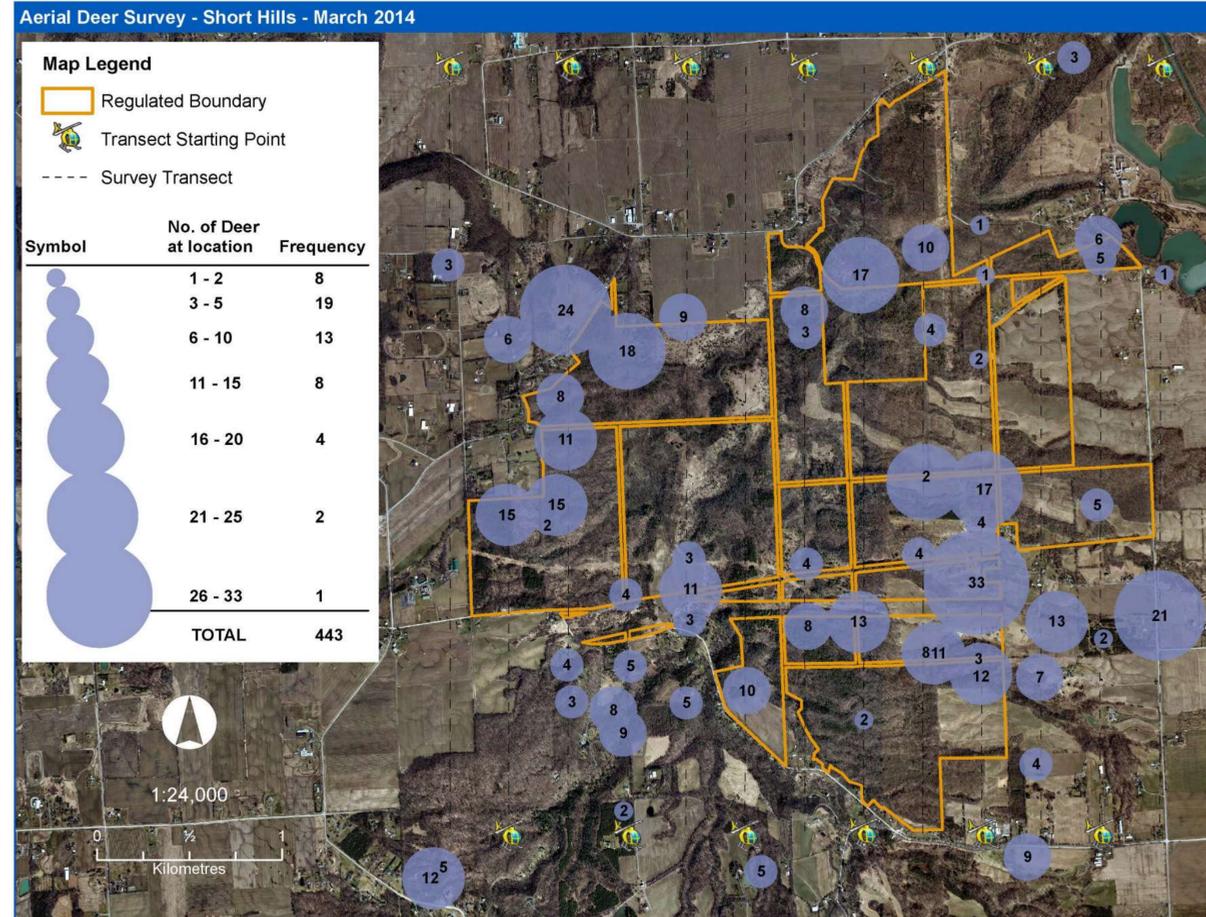


## Background

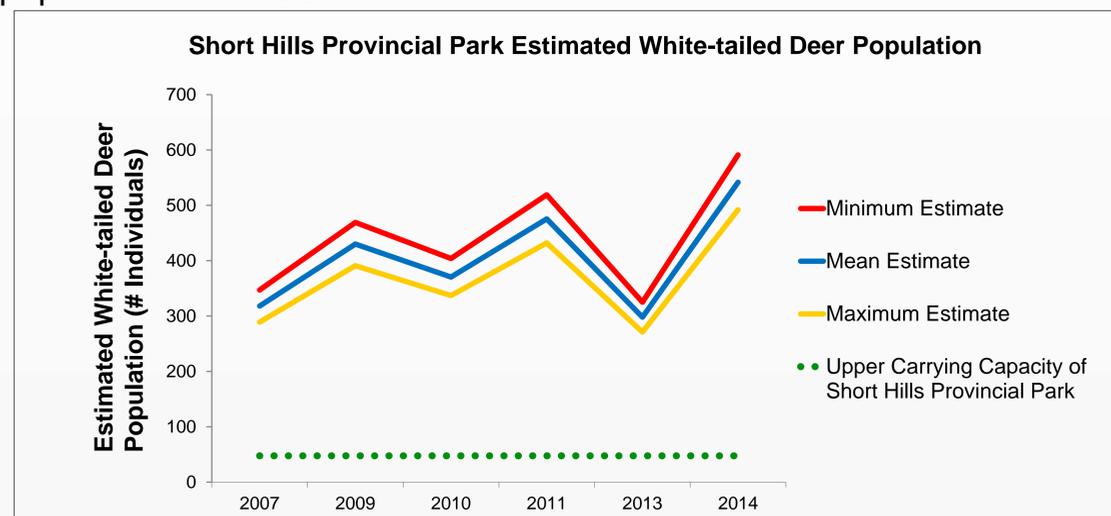
Ontario Parks conducts annual aerial surveys in many parks, including Short Hills, to monitor deer population levels. These population assessments and corresponding forest vegetation monitoring efforts help us track the relationship between deer densities in the park and the health of the forest ecosystem on which they and many other species depend.

In southern Ontario forests the maximum ecological carrying capacity of deer is between 6-7 deer per square kilometer or 45-50 deer within Short Hills Provincial Park. Deer populations higher than this can result in negative impacts to the park ecosystem.

## Results



From winter 2014 survey observations there were 296 deer within the park boundary and 164 on adjacent lands, for a total of 443 deer. Using just the in-park number, this equates to six times the maximum ecological carrying capacity (see dotted line below) of the park. Survey results since 2007 show some fluctuation in population size but numbers remain well above ecologically sustainable levels. Counting recruitment, the estimated population for fall 2014 is 541 deer.



A group of 9 deer recorded from the survey helicopter



View from the cockpit - Park staff and MNR pilot in transit



Park staff and Friends of Short Hills partner

## Methods

Each survey is completed by helicopter, recording numbers of deer observed while flying a standardized transect pattern. Deer numbers and locations are recorded using GPS. Surveys are conducted in winter and under snowy conditions to maximize detectability of deer from the air. Flight speeds range from 18 to 25 knots, depending on conditions.