Fifteen years of vegetation monitoring on a Dry Cottonwood Sand Dune at Long Point, Ontario following a reduction in deer browse

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Abstract: Over-browsing by White-tailed Deer for many decades had a profound effect on the vegetation of Long Point. Those shrubs that did exist had tree-like growth form because the lower branches were browsed (Reznicek and Catling, 1992). Between 1989 and 1991 over 500 were culled from the sandspit sloughs and marshes. The shrub dominated ground layer of the Dry Cottonwood Sand Dune fell in the years immediately following deer removal. This can be attributed to the increase in the number of generalist species such as Riverbank Grape and Choke Cherry that became established since deer removal were removed. These plants are favored browse species for White-tailed Deer. Both broad-leaved herbaceous species (distich and shrubs) have increased the proportion of their ground cover at the expense of dune grasses. After increasing to about 3.5% the relative amount of forbs has remained fairly stable, while shrubs have continued to increase.

Mean Conservatism Coefficient (MCC) is a measure of site quality. A high MCC is found to indicate greater numbers of conservative species with specific habitat requirements (Wolff and Ladd, 1986; Outlooks et al., 1993). MCC of the Dry Cottonwood Sand Dune fell in the years immediately following deer removal. This can be attributed to the increase in the number of generalist species such as Riverbank Grape and Choke Cherry that became established since deer removal were removed. These plants are favored browse species for White-tailed Deer. Both broad-leaved herbaceous species (distich and shrubs) have increased the proportion of their ground cover at the expense of dune grasses. After increasing to about 3.5% the relative amount of forbs has remained fairly stable, while shrubs have continued to increase.

References:

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