Correlation between ATV tracks and density of a rare plant (*Drosera filiformis*)

in a Nova Scotia bog

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We examined the distribution of *Drosera filiformis* Raf. (thread-leaved sundew) a rare carnivorous plant, in one of only five bogs in southern Nova Scotia where it is known to occur in Canada, to verify anecdotal observations that the plant grows most abundantly in water-filled ruts created by all-terrain vehicles (ATVs). The distribution of *D. filiformis*, ATV tracks, standing water, and a variety of common bog plants were measured using transects of 3 m, 30 m, and >100 m length. At the >100-m scale, density of *D. filiformis* was significantly correlated with ATV tracks and standing water or wet peat. At the 30-m scale, the frequency of *D. filiformis* in ATV tracks was 70%; *D. filiformis* was negatively associated with woody plants, but positively associated with *Eriophorum virginiatum* (tawny cotton-grass) which also prefers wet depressions. At the 3-m scale, significantly more *D. filiformis* were counted within water-filled ATV tracks than on the drier *Sphagnum* around them. Moderate ATV traffic creates microhabitat for *D. filiformis* and should be considered, along with other sources of wet depressions, in management plans for this endangered species.