Figure 17. The acorn crop yield (seeds/m^2) measured on Mashomack Nature Preserve, Shelter Island during 2007-2010 (TNC and Marc Abrams, Penn State University).
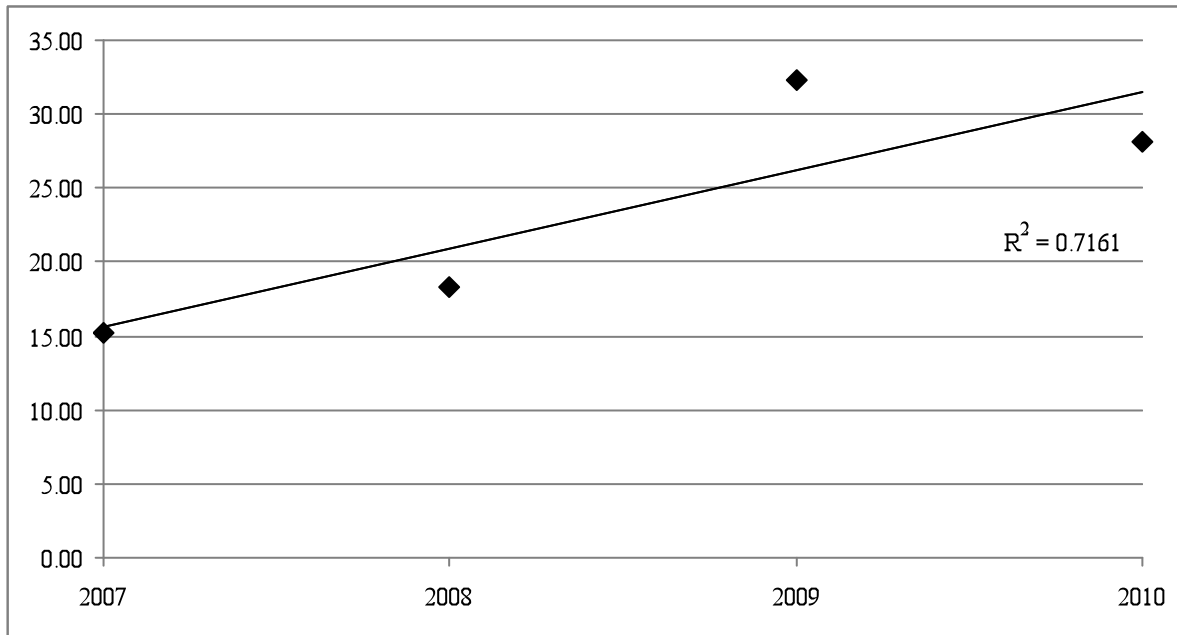

Figure 18a. Average probabilities of direct contact between deer per device throughout the study (2008-2010) displayed using graduated symbols to aid spatial examination of trends over the Shelter Island (treatment area) landscape.
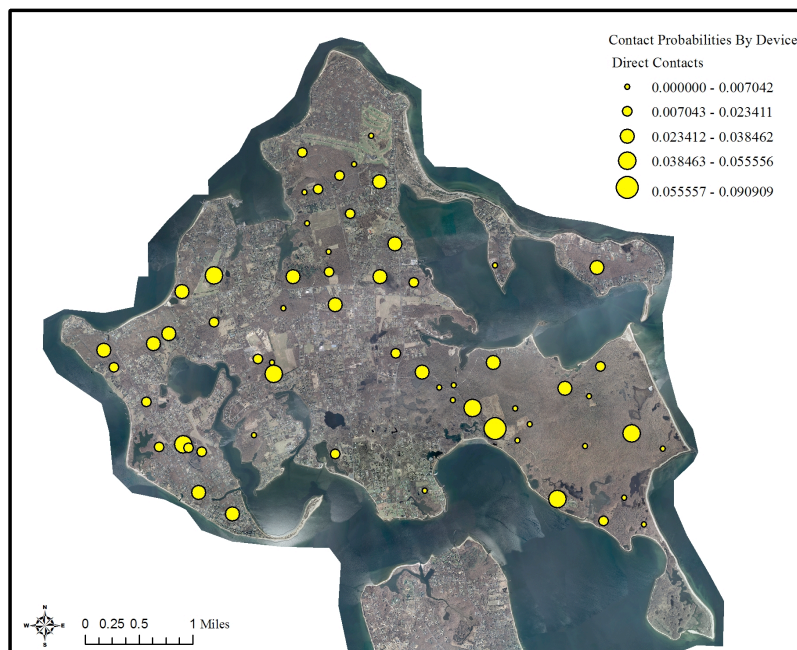
Figure 18b. Average probabilities of indirect contact between deer per device throughout the study (2008-2010) displayed using graduated symbols to aid spatial examination of trends over the Shelter Island (treatment area) landscape.
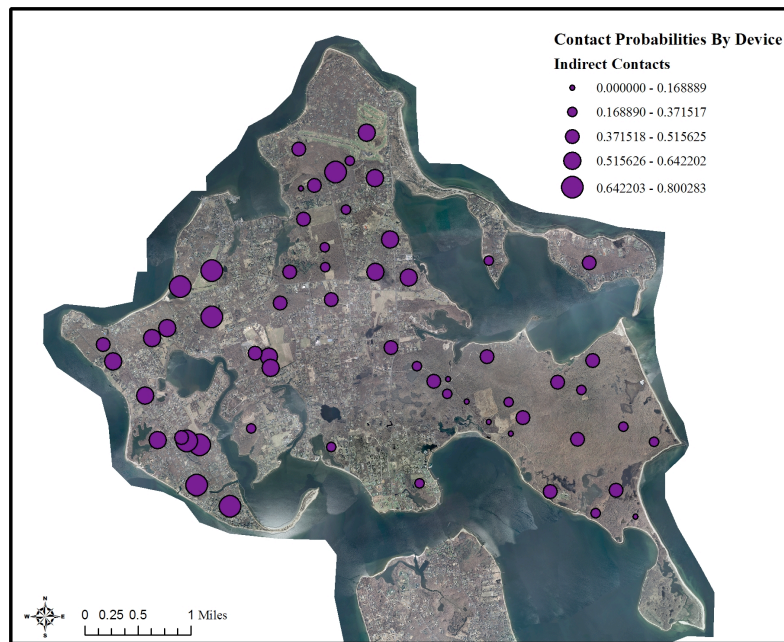

Figure 18c. The average number of deer using each device per year (2008-2010) estimated using the total amount of corn consumed (lbs) from each device and USDA guidelines (Pound et al. 2000a). Averages are displayed using graduated symbols to aid spatial examination of trends over the Shelter Island (treatment area) landscape.
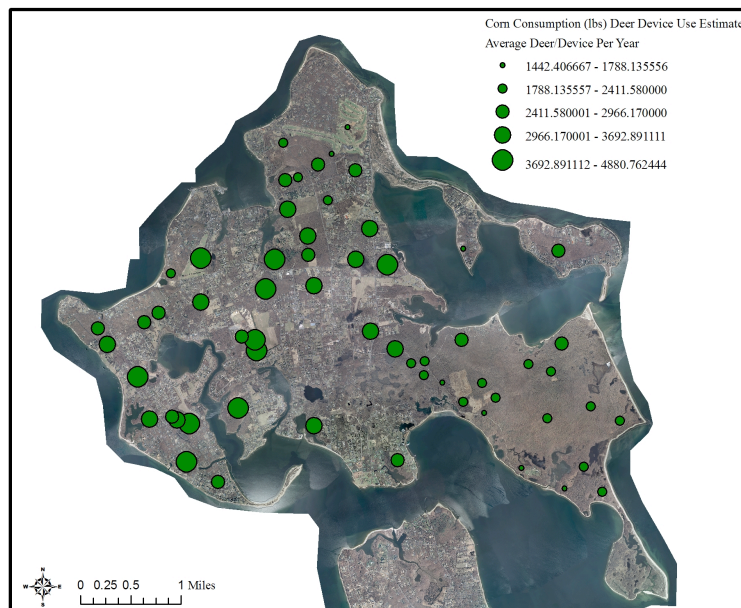
Figure 18d. The average relative number of deer observed visiting each 4-Poster device per month throughout the study (2008-2010). Averages are displayed using graduated symbols to aid spatial examination of trends over the Shelter Island (treatment area) landscape.
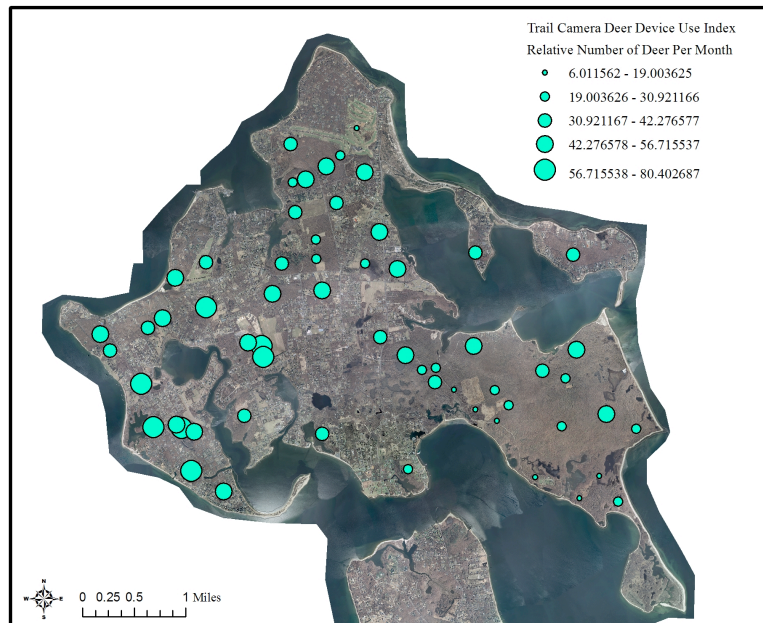

Figure 19a. The geographic locations of deer-vehicle collisions (DVCs, red circles) that occurred within the treatment area (Shelter Island, New York) during the pre-treatment year, 2005.
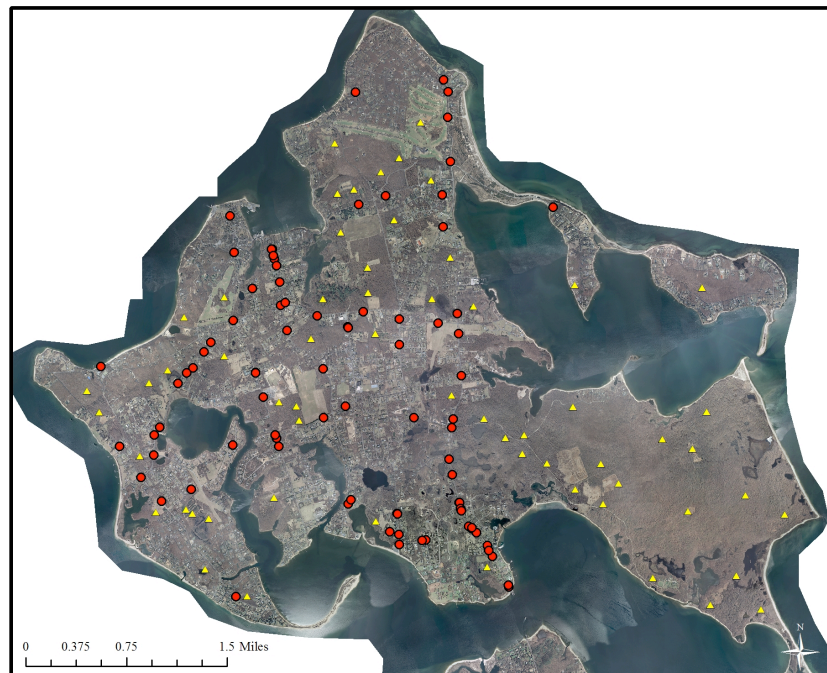
Figure 19b. The geographic locations of deer-vehicle collisions (DVCs, white circles) that occurred within the treatment area (Shelter Island, New York) during the treatment year, 2009.
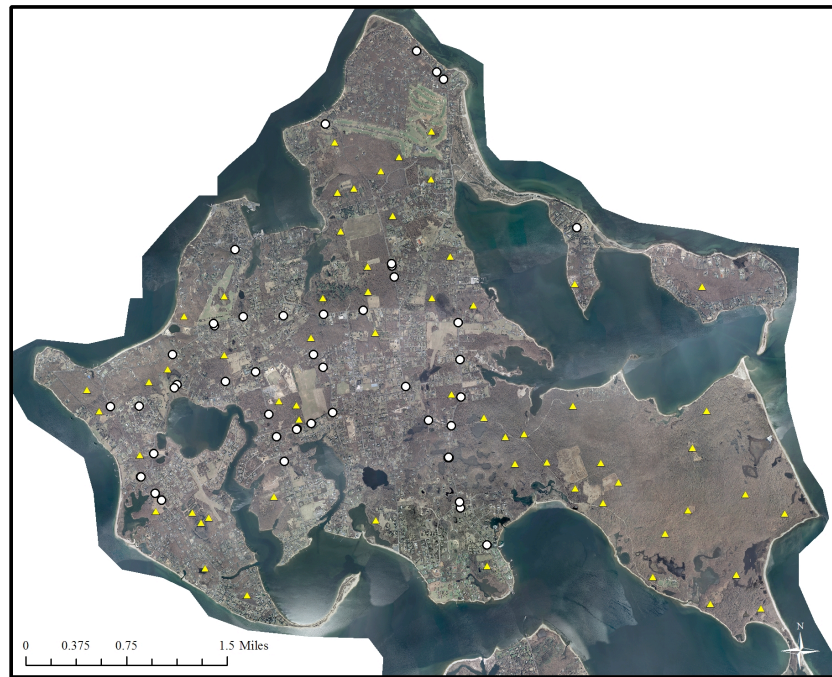

Figure 20a. Within ArcGIS 9.2, a layer of pseudo 4-Poster devices was created and overlaid on the control area (North Haven, New York) based on legal device placement criteria (i.e., 300 feet from public roads, etc.), the same best management practices Cornell used for Shelter Island device placements (i.e., roughly a minimum of 20 feet from water sources), and the same device deployment density used on the treatment area. Pseudo-devices were used during evaluation of the distances of DVCs occurrence to device locations.

Figure 20b. The legal area 4-Poster deployment could occur with the control area based on legal device placement criteria (i.e., 300 feet from public roads, etc.), the same best management practices Cornell used for Shelter Island device placements (i.e., roughly a minimum of 20 feet from water sources), and the same device deployment density used on the treatment area. Pseudo-devices were placed within the legal area based on known deer densities and accessibility to ensure placement and distribution would adequately replicate management deployment techniques.

Figure 21. The number of deer-vehicle collisions (DVCs) occurring between March through November within the treatment area (Shelter Island) and control area (North Haven, New York) each year throughout 2005-2010.
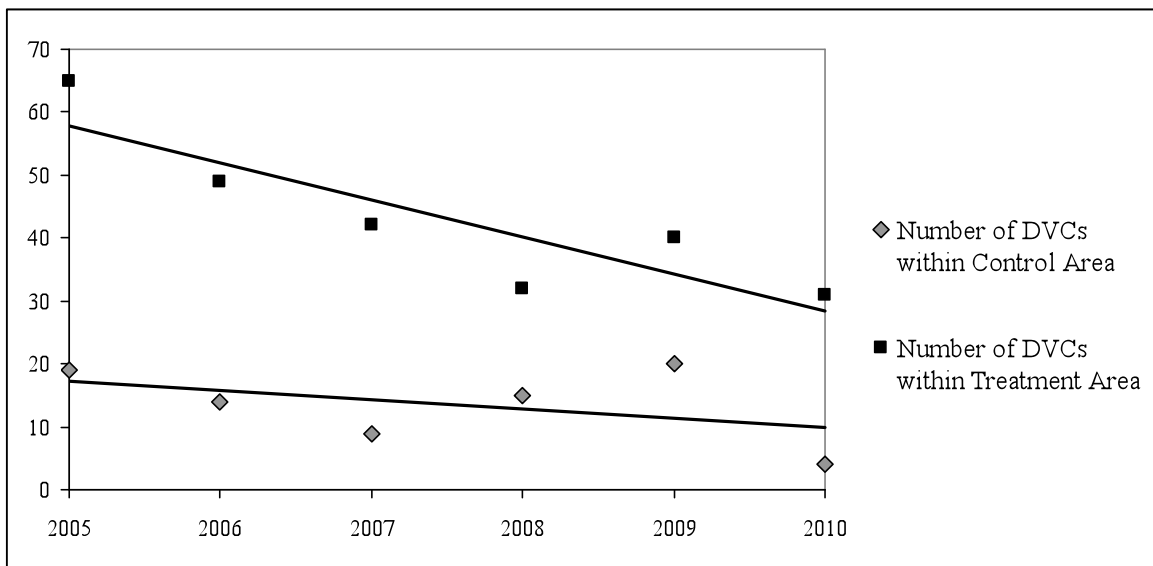
Figure 22. Traffic volume (AADT or average vehicles/day; Suffolk County and New York State DOT) recorded within the treatment area (Shelter Island) and control area (North Haven, New York) during 2005-2010.
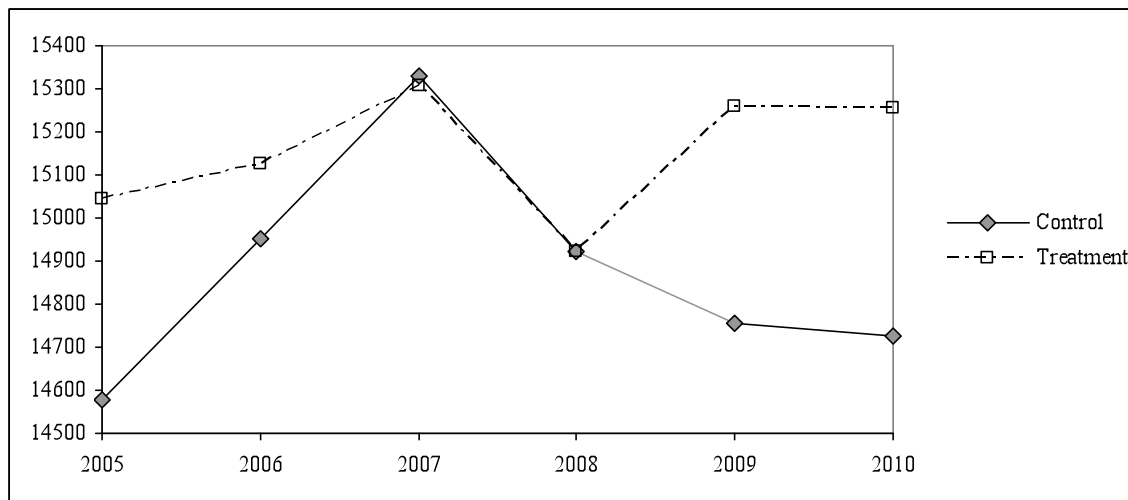

Figure 23. The total number of deer harvested within the treatment (Shelter Island) and control (North Haven, New York) areas between 2005 and 2009. Data were obtained from the NYS DEC Bureau of Wildlife, Shelter Island Police Department, and North Haven Village officials.
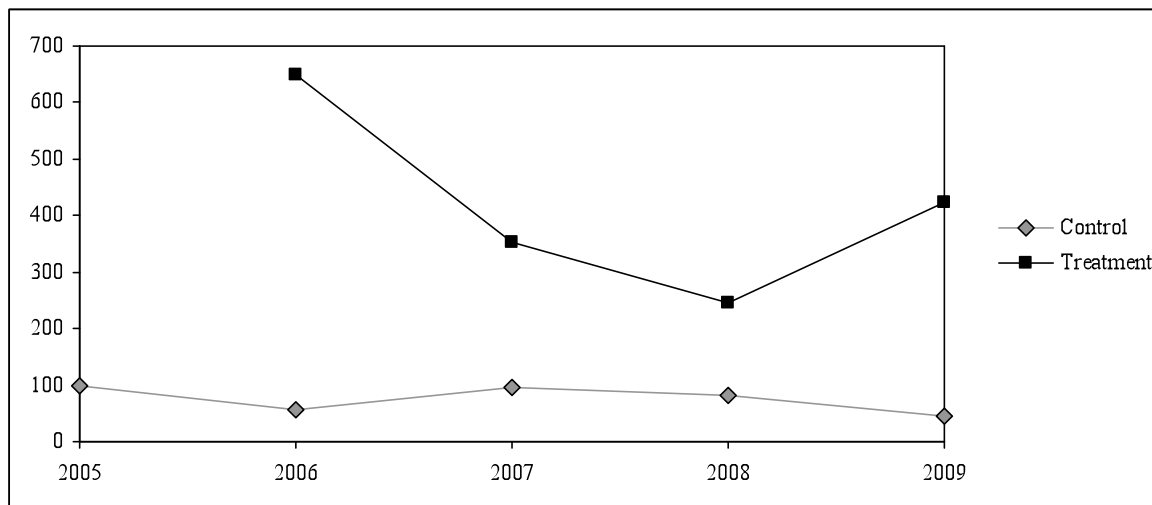
Figure 24a. The percentages of natural plants sampled under the browse intensity categories unbrowsed (NB), lightly (L), moderately (M), heavily (H), or severely (S) during 2009 within the natural vegetation survey sites on the control area (NH) and the treatment study areas (SIA and SIB).
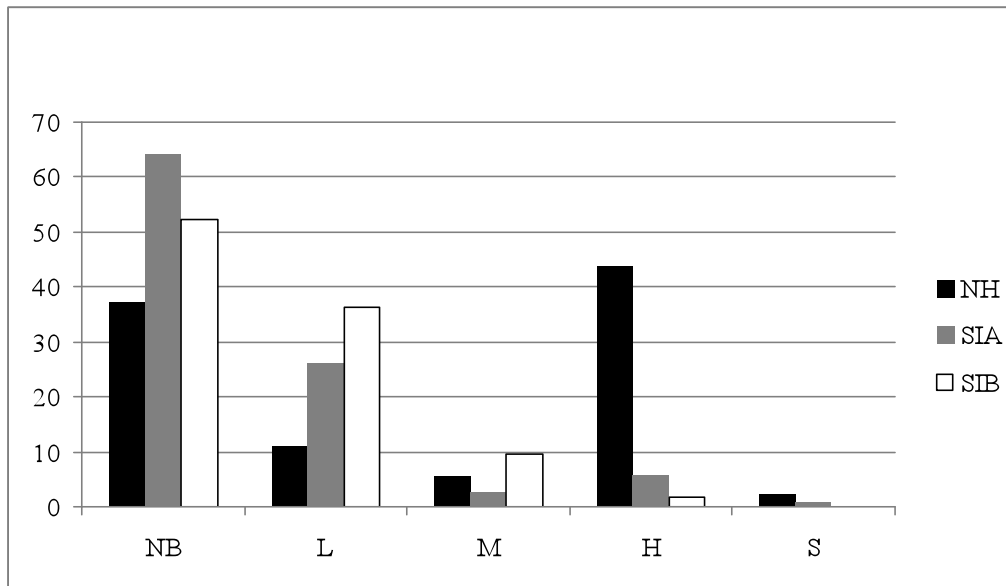

Figure 24b. The percentages of natural plants sampled under the browse intensity categories unbrowsed (NB), lightly (L), moderately (M), heavily (H), or severely (S) during 2010 within the natural vegetation survey sites on the control area (NH) and the treatment study areas (SIA and SIB).
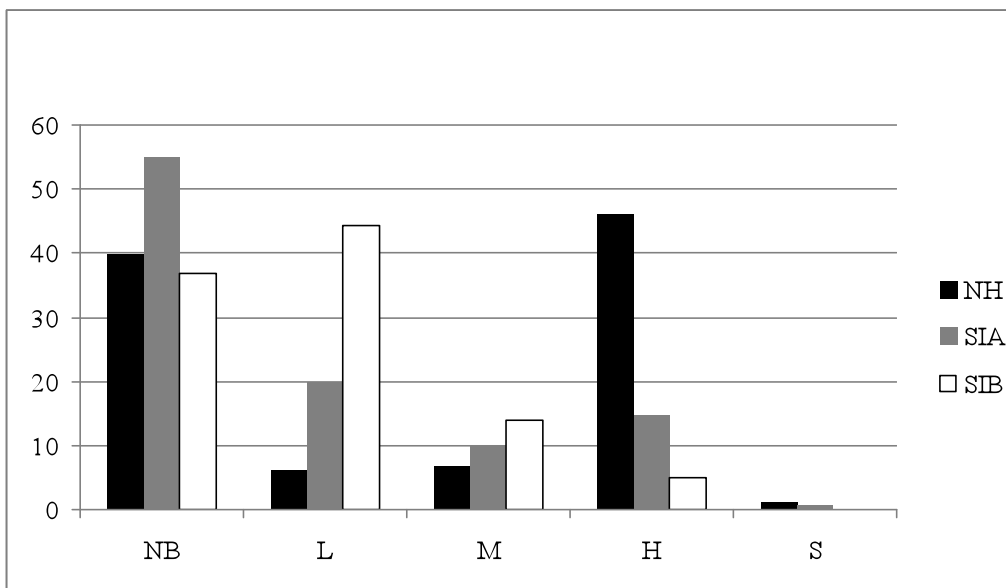
Figure 25a. The numbers of natural indicator plants sampled under the browse intensity categories unbrowsed (NB), lightly (L), moderately (M), heavily (H), or severely (S) during 2009 within the natural vegetation survey sites on the control area (NH) and the treatment study areas (SIA and SIB). For natural indicator species classification, oak spp. were considered high preference indicator species, cherry spp. were medium preference, and American beech were low preference.
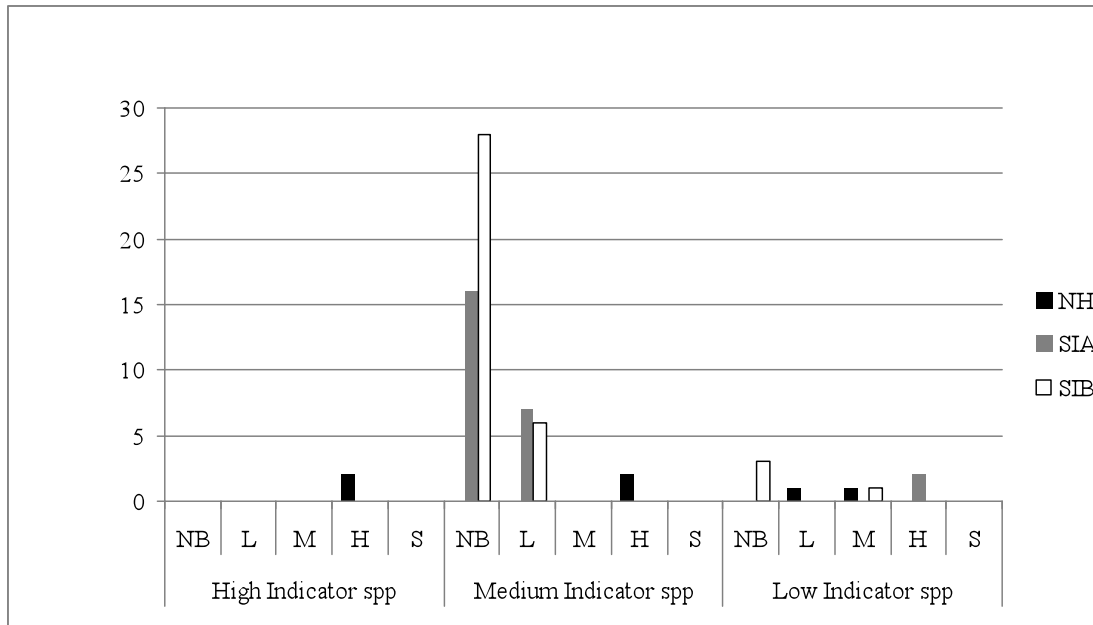

Figure 25b. The numbers of natural indicator plants sampled under the browse intensity categories unbrowsed (NB), lightly (L), moderately (M), heavily (H), or severely (S) during 2010 within the natural vegetation survey sites on the control area (NH) and the treatment study areas (SIA and SIB). For natural indicator species classification, oak spp. were considered high preference indicator species, cherry spp. were medium preference, and American beech were low preference.