

Controlling Vertebrate Pests at Agricultural Research Stations

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White-tailed Deer



- Random browsing generally results in only light to moderate yield loss.
- Deer tend to move through a field as they feed
- Most damage to soybeans occurs as light to moderate browsing spread out over large portions of the field.
- Except for very early stages of soybean, deer feed only on part of the plant and move on.
- Repeated feeding can result in severe damage to individual plants reducing yield (ruined research).



Deer damaged corn

Deer Damage to Soybeans



Deer Damage in Nurseries

- Browsing damage occurs when deer eat the foliage, stem tips, and buds from trees and shrubs in the winter and early spring.
- Damage occurs in August as bucks rub the velvet from their antlers.
- Various repellents are effective at least for periods of time to control browsing. Those that are most effective have both a repellent odor and a repellent taste.
- Planting the perimeter with a more enticing crop such as crimson clover has worked for some nurseries. Fencing remains the best long-term solution.
- Using protective tubes around tree trunks (not always substantial enough to protect against rubs)

Deer Damage in Nurseries



AREC Options and Issues

- Hunting banned on Univ. property; employees are permitted to remove animals destroying plots
- Out-of-season hunting permit from state
- Employees/friends hunting in season with written/oral permission
- Asking neighboring property owners to hunt
- Deer fencing around plots
- Liability release forms
- Neighboring property owners' issues (gunfire)
- Graduate student/staff in tenant houses

Other Vertebrates

- For pigeons nesting in the machine shed, arrive early, walk around the corner, and shoot at them with a shotgun as they fly out.
- Pyrotechnics for geese
- Border plantings around plot fields as sacrifice appeasement to groundhogs and rabbits.
- Set out body-gripping traps for groundhogs-avoid traps near houses (risk to someone's dachshund or cat!)
- Coyotes killed 20 lambs, 12 ewes - working with USDA trapper and using guard dogs

Groundhog Ready Soybeans



Reference cited http://www.agriculture.purdue.edu/fnr/cropdamage/wildlife/deer_bean.htm