Deer and Vole Control

Nancy Lewis – Baltimore County Master Gardeners
Overview - Voles

- Difference between a vole and a mole
- Vole habitat
- What vole damage looks like
- Barrier methods of restricting damage
- Chemical methods of damage reduction
- Traps and other methods
What is eating my plants from the bottom up?
Voles versus Moles

- Voles feed on vegetation
- Moles feed on insects and grubs
- Moles rarely spend time above ground
- Voles attack plants from both above and below ground
“it was a good winter for voles – there was a beautiful snow cover and the ground wasn’t frozen too deep so digging was a lot easier and the snow layer protected them from predators”

Ed Marotte – Consumer Horticulturalist University of CT Cooperative Extension System
Voies versus Moles

- The humps you see in your yard are from moles (but may be used by voles)
- The disappearing foliage and roots is due to voles
- Simply said – one is a carnivore and the other is a vegetarian
Vole habitat

- Voles search out cover
- Hide from main predators – hawks, owls, foxes and cats
- Excess mulch
- Pavers and stepping stones
- Leafy cover
- They like to tunnel under these
Vole habits

- Numerous burrows and tunnels
- Multiple escape routes
- Feed mainly in daylight hours
- Devour plants from the roots to the leaves
Vole damage
Vole damage

Missouri Botanic Garden photo
Woody Plant Damage
Favorite Targets

- Bulbs other than narcissus and snow drops
- Hostas
- Young woody shrubs
Barrier Methods
Barrier Methods
Barrier Methods
Barrier Methods

- Crushed limestone, Permatill, shells or other small rocks in a large area around your planting hole
- Tucked in tree roots
- The vole finds the rocks and usually moves in another direction
Permatill or lava rock
Barrier Methods
Barrier Methods
Barrier Methods

- Sensitive young trees you can use a tree wrap to prevent girdling

Benmeadows.com photo

Johnson Nursery.com photo
Predators

- Hawks
- Owls
- Cats
- Foxes
- Digging dogs
- Snakes
- To allow them to do their work reduce cover – don’t over mulch
Bait
Apple Sign Test

- Locate areas of damage and tunnels
- Place nursery pot upside down at 10-15' intervals
- Apple underneath
- Secure with a rock or brick
- Check every few days
Traps

- Baited snap traps along runways
- Peanut butter mixed with oatmeal is said to be a good bait
- Be prepared for collateral damage – chipmunks
Aversion techniques

- Many escape routes
- Hoses don’t flush them out
- Castor bean granules marginal benefit
Alternate Methods

- Tulip, crocus, lily bulbs etc. can be soaked in a deer repellant for up to 60 minutes – throws the scent off – works for squirrels
- Plant bulbs deeply – 10-12”
- Choose plants that voles don’t like
- If they dig up or defoliate your herbaceous plants – keep watering the roots and give a little fertilizer and often they come back.
Vole Control

- They are everywhere
- They are hard to see
- Feed both above and below ground
- Yearly variation in population
- Keep cover to a minimum
- Barrier methods for all new plantings that you can’t afford to lose.
Deer Control
Overview - Deer

- Deer habits
- Lyme Disease
- How to recognize deer damage
- Barrier methods of damage reduction
- Chemical methods of damage reduction
- Aversion techniques
- Deer and vole resistant plantings
MD Deer Herd

- White tail deer are native in all 23 counties
- Exotic species – sika
- Range is about 1 square mile or 640 acres
- Grazers and browsers
Lyme Disease

- Extremely prevalent in Maryland
- Carried by deer ticks that also feed on human hosts
National Lyme disease risk map with four categories of risk

Areas of predicted Lyme disease transmission

- High risk
- Moderate risk
- Low risk
- Minimal or no risk

Note: This map demonstrates an approximate distribution of predicted Lyme disease risk in the United States. The true relative risk in any given county compared with other counties might differ from that shown here and might change from year to year. Risk categories are defined in the accompanying text. Information on risk distribution within states and counties is best obtained from state and local public health authorities.
Deer Damage
Gold-Banded Skipper

Hog Peanut
Exclusion Methods

- Most deer can jump 8 feet easily
- Fencing is costly if you have a large area
- Fairly unobtrusive
- NIH division study found that deer fence reduces transmission of Lyme Disease
Exclusion Methods

- Fences require maintenance
- Vegetation removal and control along the fence is time-consuming
- Try to erect fence prior to allowing deer to start nibbling
Exclusion Methods
Exclusion Methods
Exclusion Methods
Exclusion Methods
Chemical Deterrents

- Products available for home use and specialized landscapers that do deer control
- Most work very well
- Some smell better than others
- Taste or odor based
Chemical Deterrents

- The following repellents are approved for use on edible plants:
  - Hinder*
  - Millers’ Hot Sauce *
  - Deer Stopper*
  - Plant Pro-Tec*
  - Deer Buster deer and & rabbit repellent*
Chemical Deterents - Scent

NEW! Plantskydd Granular—Easy to Use!
Repels rabbits and small critters, including chipmunks, squirrels, voles, nutria and opossum.

Plantskydd Deer Repellent—A Proven Leader!
#1 Most Effective, #1 Longest Lasting, #1 Most Tested Effective against deer, elk, moose and rabbits.

100% Natural Deer & Rabbit Repellent

32 Ounce Concentrate 1 Gallon Concentrate
Chemical Deterrents - Taste
Vegetation Management
Deer Resistant Plants

Monarda

Echinops
Deer Resistant Plants

Digitalis

Bluestone photo

Alchemilla
Deer Resistant Plants

Arisaema

Brunnera
Deer Resistant Plants

Iris

Caryopteris
Deer Resistant Plants

Polemonium

Paeonia
Deer Resistant Plants

Achillea

Anthemis
Deer Resistant Plants

Artemesia

Helianthus
Deer Resistant Plants

Narcissus

Carex siderosticha variegata
Deer Resistant Plants

Cephalotaxus harringtonia  Missouri Botanical Gardens photo
Kolkwitzia
Deer Management

- Deer herd is adapted to our landscapes
- Lyme Disease continuing problem
- Many methods for deterring and exclusion
- Choose deer resistant plant varieties
Helpful websites

- http://njaes.rutgers.edu/deerresistance/
- www.hgic.umd.edu