



# **Deer Defense for Home Gardeners: *Coexisting with the Wiliest of Wildlife***

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Dutchess County**

# **Deer in the Hudson Valley**

***It's not their fault***



- 1. Abandoned farmland reverted to forest**
- 2. Development reclaimed farmland and forests**
- 3. Overabundant white-tailed deer adapted to humans**
- 4. With surging deer population:**
  - Tick-borne illnesses**
  - Traffic accidents**
  - Ecological impacts**

# ***Deer in Dutchess County***

**“ The same landscape practices that improve the aesthetics of the area will also create better habitat conditions for some wildlife species that we would rather discourage. *We need to learn to live with wildlife and how to minimize the negative impacts.*”**

*University of Maryland Extension  
Master Gardener Handbook*



**Humans can Adapt:**  
***Learn a new aesthetic***



# Protecting your Home Garden:

## *Know your deer*



- Deer will eat anything if hungry enough
- Deer damage can be worst in late winter/early spring
- Easy to distinguish: Deer lack upper incisors, leave ragged, broken ends on browsed branches
- Deer will nibble on unpalatable items if they are located in their feeding area.

# Protecting your Home Garden:



## 1. Barriers

*Fencing*  
*Wrapping*

## 2. Repellants

*Smell and taste based*  
*Scare devices*

## 3. Landscape alternatives

*Shut Down the Salad Bar*

*Or ... combinations of all 3*

**1.**  
**Install**  
**Barriers:**  
*Encourage a*  
*Different*  
*Neighborhood*  
*Route*



# Barriers: Fencing

***“The only sure way to eliminate deer damage in rural or suburban areas is to install an 8-foot fence.”***

***University of Maryland Extension  
Master Gardener Handbook***





# Barriers: Fencing

- **8 feet high minimum**
- **Sturdy**
- **Can be plastic netting**
- **Can lower height IF enclosure is small enough for deer to perceive trap –**



# Barriers:

## *A nearly invisible deer fence*

### Supplies:

#### Minimum:

- 36" stakes
- Monofilament fishing line to string at 2 levels, top height 30"

#### Increase effectiveness with:

- Small flaps of cloth stapled halfway between stakes
- Repellent spray



# Barriers: *Wrapping*



## **2. Use Repellents: *Make your Gardens Yucky***



- **Taste and Smell based repellants work variably well**
- **Scare devices only have temporary effect:**
  - ***Scare tape***
  - ***Lights, whistles***
  - ***But dogs work if allowed free access to yard***

# **Taste and smell based repellents:**

## ***Aunt Lucy has her favorite home remedy***

- **Human hair**
- **Bar soap**
- **Pepper sprays**
- **Blood meal**
- **Urine**

***Not registered with EPA,  
not researched,  
not recommended***

***Another story: Milorganite ®***

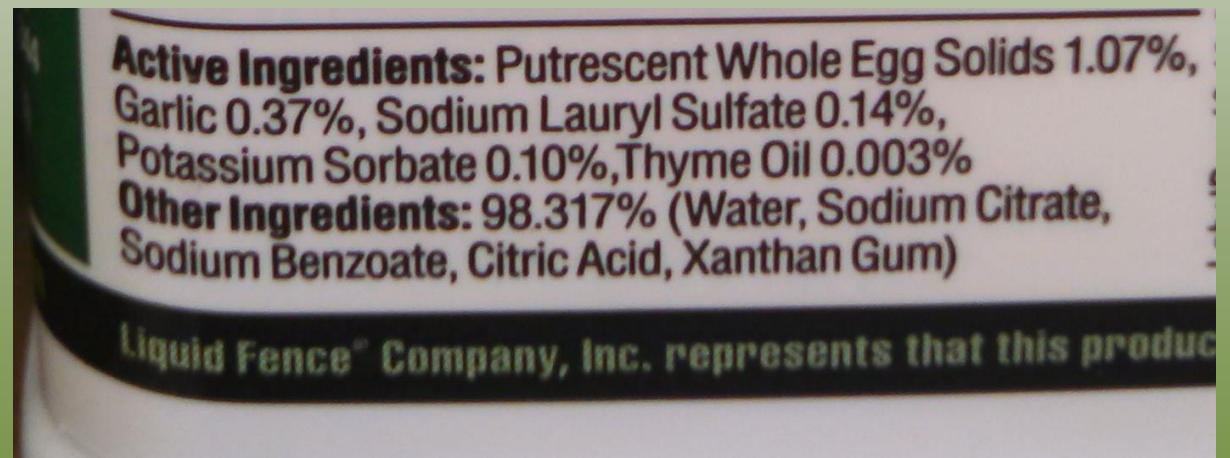


**Research:**  
**Taste-based repellent sprays**  
**using putrescent egg solids**  
**work best overall.**

**Sprays with names like:**

- **Liquid Fence** ®
- **Deer Off** ®
- **Go Away** ®
- **Deer B Gone** ®

***Read the label!***



**About spray repellents:**  
***No guarantees***



- 1. May want to *rotate* sprays over time**
- 2. Start with directions on *label***
- 3. Some brands more durable in *rain* than others**
- 4. Spray more often during *active growing season* when plants “grow out” of the repellent quickly**

**3.**  
**Learn how to**  
**choose plants**  
**deer dislike:**  
***Shut down the***  
***Salad Bar***

*Mary Gall, MG Class of '12*





***An anecdotal segue...***



## ***Tale of a roadside garden***



- 20 years ago interplanted 30 daylilies with tulips and hostas
- Swapped out deer candy over time... but not entirely
- Learned to use 3-pronged strategy to Detour the Deer

## ***A roadside garden strategy:***

- 1. As snow recedes, lay down Milorganite ® to protect new shoots**
- 2. As foliage reaches 1', begin spraying repellent**
- 3. Erect fishing line fence before daylilies begin throwing up scapes**



## ***A roadside garden strategy, continued:***

4. Make sure fenced area is small enough to look like a trap to deer!



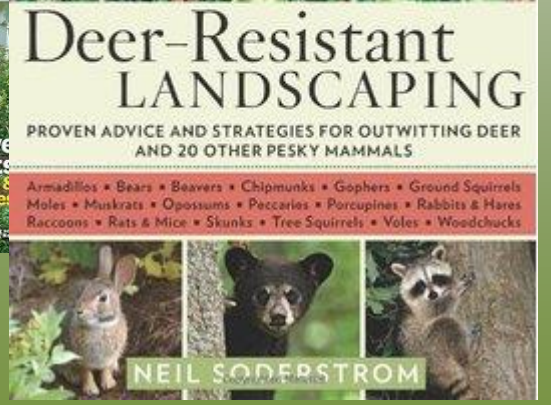
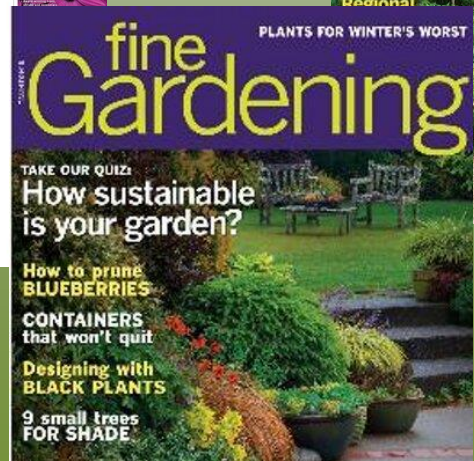
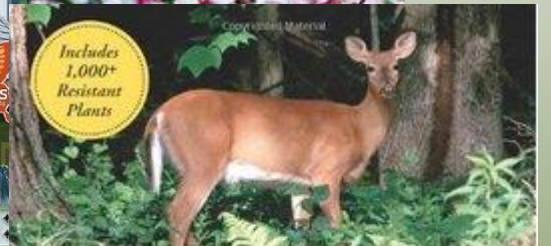
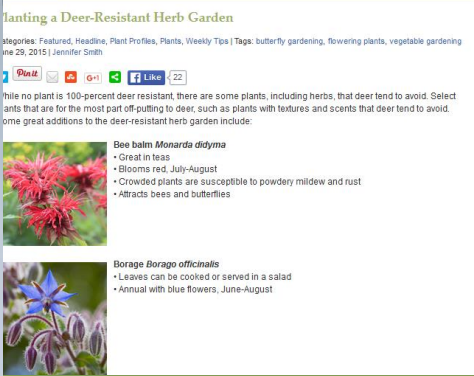
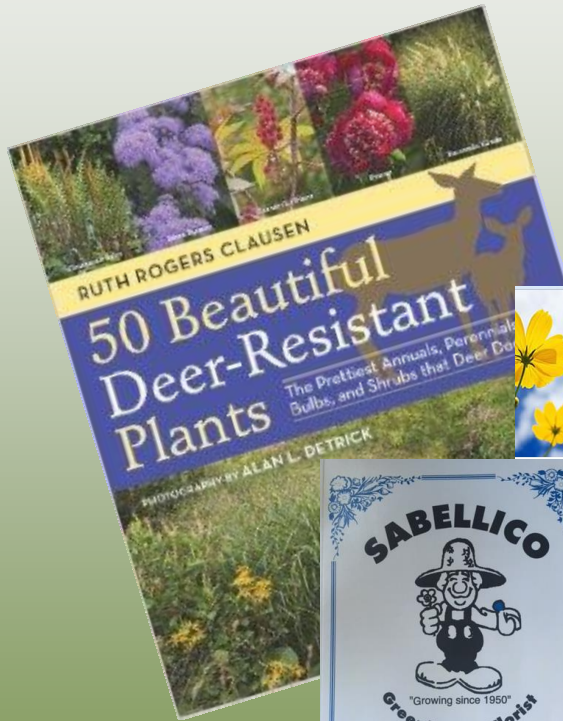
**3.**  
**Learn how to**  
**choose plants**  
**deer dislike:**  
***Shut down the***  
***Salad Bar***

*Mary Gall, MG Class of '12*



# Learn how to choose plants deer dislike:

## Browse books, magazines, catalogs, internet



# Learn how to choose plants deer dislike, continued

Use an online,  
comprehensive,  
searchable  
database

Rutgers.edu/deerresistance

The screenshot shows the website interface for Rutgers New Jersey Agricultural Experiment Station. At the top, there is a navigation bar with 'Rutgers', 'Executive Dean of Agriculture and Natural Resources', and 'School of Environmental and Biological Sciences'. Below this is a red header with the Rutgers logo and 'New Jersey Agricultural Experiment Station'. A search box is located in the top right corner. The main navigation menu includes 'Cooperative Extension', 'Research', 'Make a Gift', and 'Contact Us'. The page content is divided into a left sidebar and a main content area. The sidebar contains a list of categories under 'Information about...' and a 'Serving New Jersey' section with a map of New Jersey. The main content area features a breadcrumb trail, a title 'Landscape Plants Rated by Deer Resistance', and a 'Search' box. Below the search box is a 'Browse' section with dropdown menus for 'Select Rating Category' and 'Select Plant Type', and a 'Sort By' dropdown. A 'View' button is also present. At the bottom of the page, there is a 'KEY:' section with color-coded letters A, B, C, and D representing different damage levels, and a 'Send us your question!' link.

Rutgers | Executive Dean of Agriculture and Natural Resources | School of Environmental and Biological Sciences

**RUTGERS** New Jersey Agricultural Experiment Station

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## Landscape Plants Rated by Deer Resistance

[Credits](#) | [Download PDF Version](#)

The following is a list of landscape plants rated according to their resistance to deer damage. The list was compiled with input from nursery and landscape professionals, Rutgers New Jersey Agricultural Experiment Station (NJAES) Cooperative Extension personnel, and Master Gardeners in Northern N.J.

Realizing that no plant is deer proof, plants in the *Rarely Damaged*, and *Seldom Severely Damaged* categories would be best for landscapes prone to deer damage. Plants *Occasionally Severely Damaged* and *Frequently Severely Damaged* are often preferred by deer and should only be planted with additional protection such as the use of fencing, repellents, etc. Success of any of these plants in the landscape will depend on local deer populations and weather conditions.

**KEY:**  
**A** = Rarely Damaged  
**B** = Seldom Severely Damaged  
**C** = Occasionally Severely Damaged  
**D** = Frequently Severely Damaged

**Search**  
Search Common Name or Latin Name:  
  
Search

**Browse**  
Select Rating Category:  
All Ratings  
Select Plant Type:  
All Types  
Sort By:  
Rating  
View

All Ratings - All Types

**Need More Help?**  
We have trained professionals in many different subject areas.  
▪ [Send us your question!](#)

# Learn how to choose plants deer dislike, continued

## Searching the Rutgers Database

Search plants by latin or common name

List is color coded to reflect 4 categories of deer resistance

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### Search

Search Common Name or Latin Name:

### Browse

Select Rating Category:

Select Plant Type:

Sort By:



# Learn how to choose plants deer dislike, continued

## Browsing the Rutgers Database

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...deer damage. The list  
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...e often preferred by  
...d with additional  
...encing, repellents, etc.  
...in the landscape will  
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### Search

Search Common Name or Latin Name:

### Browse

Select Rating Category:  
Rarely Damaged

Select Plant Type:  
All Types  
All Types  
Annuals  
Biennials  
Bulbs  
Ferns  
Groundcovers  
Ornamental Grasses  
Perennials  
Shrubs  
Trees  
Vines

...plants rated  
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...and weather

### Search

Search Common Name or Latin Name:

### Browse

Select Rating Category:  
Rarely Damaged




Select Plant Type:  
All Types

Sort By:  
Rating  
Common Name  
Latin Name  
Rating

## Learn how to choose plants deer dislike, continued

# Browsing the Rutgers Database

### Results for 'rose'

Common Name	Latin Name	Type	Rating
<a href="#">Annual Vinca</a> 	<i>Catharanthus rosea</i>	Annuals	A
<a href="#">Lenten or Christmas Rose</a> 	<i>Helleborus sp.</i>	Perennials	A
Rose Campion	<i>Lychnis coronaria</i>	Perennials	A
Rosemary	<i>Rosmarinus officinalis</i>	Annuals	A
Bog Rosemary	<i>Andromeda polifolia</i>	Shrubs	B
Parsley	<i>Petroselinum crispum</i>	Annuals	B
Primrose	<i>Primula sp.</i>	Perennials	B
<a href="#">Rose of Sharon</a> 	<i>Hibiscus syriacus</i>	Shrubs	B
Hybrid Tea Rose	<i>Rosa x hybrid</i>	Shrubs	C
Multiflora Rose	<i>Rosa multiflora</i>	Shrubs	C
Rose Mallow	<i>Hibiscus moscheutos</i>	Perennials	C
Rosebay Rhododendron	<i>Rhododendron maximum</i>	Shrubs	C
Rugosa Rose	<i>Rosa rugosa</i>	Shrubs	C

***Learn how to choose  
plants deer dislike:***

**Consider broad  
categories of plant  
characteristics**



# Types of Plants

## Deer love best



*Tender, succulent leaves*

**Hostas, tulips  
rhododendron, azalea**

*Buds, tips, blooms*

**Daylilies, tulips  
hydrangea**

*Narrow leaf evergreens*

**Arborvitae, cedar, yew  
(vs. pine, spruce)**

*Fruit and Vegetables*

**Fruit trees  
Vegetables  
Berries**

# **Types of Plants deer may dislike**



## ***Strongly scented, bitter foliage***

**Herbs, artemisia, monarda, nepeta, allium**

## ***Fragrant flowers***

**Peony, iris, daffodils**

## ***Toxic***

**Daffodils, foxgloves, poppies, hellebore**

## ***Fuzzy, prickly or sticky***

**Lamb's ears, cleome, rudbeckia hirta, ageratum, dusty miller, globe thistle**

# Plant Families deer may dislike

## Grasses

Fountain Grass  
*Pennisetum setaceum*  
'*Rubrum*'



*Hakonechloa macra*  
'*Aureola*'



## Ferns

Hay-scented Fern  
*Dennstaedtia punctilobula*



Cinnamon Fern  
*Osmundastrum cinnamomeum*



# More Families of Plants Deer dislike Sage



Annual scarlet sage  
*Salvia splendens*



Perennial blue sage  
*Salvia nemerosa* 'Caradonna'



Russian sage  
*Perovskia* 'Little Spire'

# **Adapt to a Deer Proof Aesthetic: *Choose plants deer dislike***

## **Beautiful alternatives:**

- ***Shade or sun***
- ***Appeal for all parts of growing season***

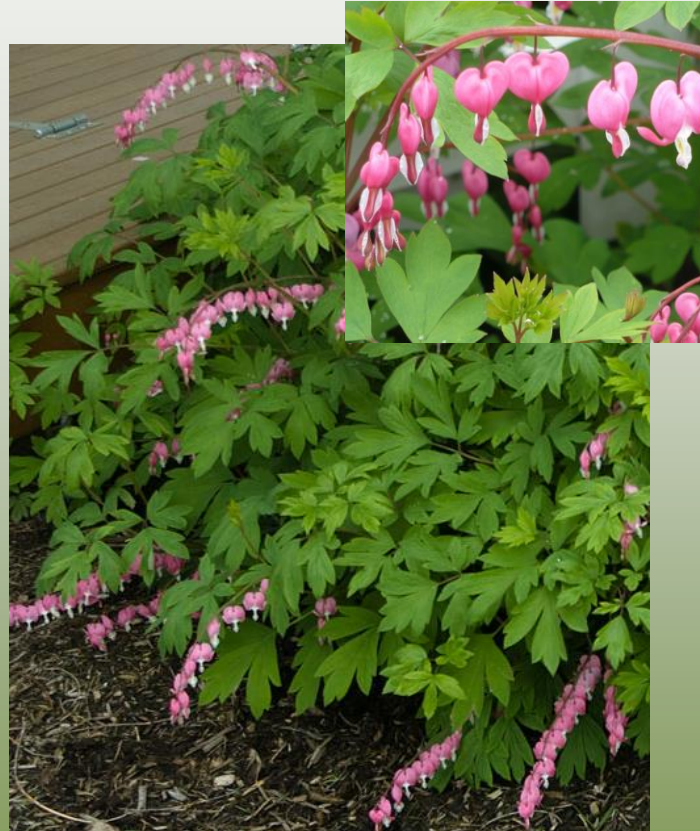




# Deer-resistant aesthetic *for shade gardens...* *in spring*



Lenten Rose  
*Helleborus*



Bleeding Heart  
*Laprocampnos spectabilis*



Japanese Andromeda  
*Pieris japonica*

# Deer-resistant aesthetic for shade gardens... in early to mid summer



Ligularia 'The Rocket'  
*Ligularia stenocephala*



Japanese Painted Fern  
*Athyrium nipponicum pictum*



Bottlebrush Buckeye  
*Aesculus parviflora*



# Deer-resistant aesthetic *for shade gardens...* *in late summer to fall*



Japanese Anemone  
*Anemone x hybrida* 'September Charm'



Black Snakeroot, Bugbane, Cohosh  
*Actaea simplex* "Hillside Black Beauty"  
(formerly *Cimicifuga ramosa*)



Chokeberry  
*Aronia arbutifolia* 'brilliantissima'

# Deer-resistant aesthetic *for sunny gardens...* *in spring*



Daffodil  
*Narcissus 'Tete a tete'*



Ornamental Onion  
*Allium 'Globemaster'*



False Indigo  
*Baptisia australis*

# Deer-resistant aesthetic *for sunny gardens...* *in early to mid-summer*



Yarrow  
*Achillea millefolium 'Saucy Seduction'*



Globe Thistle  
*Echinops*



Summersweet, Pepperbush  
*Clethra*

**Deer-resistant aesthetic for sunny gardens...  
in late summer to fall**



Monkshood  
*Aconitum*



Beautyberry  
*Callicarpa* sp.



Bluebeard  
*Caryopteris* × *clandonensis* 'Blue Mist'

# Being wilier:

## *In search of burgundy foliage*



Purple Leaf Sand Cherry  
*Prunus cistena*



Japanese Barberry  
*Berberis thunbergii*



Weigela 'Spilled Wine'  
*Weigela florida*

**Message to our  
deer neighbors:**

***Humans can  
adapt too!***







***Are you up to the  
challenge?***

***Have fun Coexisting  
with the Wiliest of  
Wildlife!***

**Chris Ferrero**  
***Master Gardener Volunteer***  
***Cornell Cooperative Extension***  
***Dutchess County***

## ***A quick look at other Nuisance Wildlife:***

- 1. Rabbits**
- 2. Chipmunks and Squirrels**
- 3. Woodchucks**
- 4. Voles and Moles**
- 5. Birds**
- 6. Skunks**



<http://wildlifecontrol.info/publications/cornell-publications/>

## Cornell Publications

### Wildlife Damage Management Fact Sheets (PDF files)

- [Bat\\_factsheet](#)
- [BlackBear](#)
- [Crows](#)
- [Deer\\_factsheet](#)
- [Deer-Vehicle\\_factsheet1](#)
- [Home-Grounds-Garden](#)
- [Moles](#)
- [Raccoon\\_factsheet](#)
- [reducing deer damage](#)
- [Snakes\\_factsheet](#)
- [Striped Skunks](#)
- [Tree Squirrels](#)
- [Voles](#)
- [Woodchuck\\_factsheet](#)
- [Woodpeckers](#)



# ***A quick look at other Nuisance Wildlife:***

## **Rabbits**

**Damage < 2.5 feet  
distinguished by clean cut**

**Best practice:**

**Chicken wire fence secured to  
ground**

**Taste-based repellents**

***Note: Live trapping of wildlife limited in  
NYS - may not transport off your property***



# ***A quick look at other Nuisance Wildlife:***

## **Chipmunks**

- Curious and devious
- Feed on plants and small animals
- Cause damage with tunnels

## **Squirrels**

- Feed on nuts, buds, bark, small animals, garden vegetables
- Cause damage if in buildings
- Use Capsaicin treated birdseed

## **Best practices**

- Remove food sources 15-30 feet away from home
- Protect structures with hardware cloth
- Utilize cage or snap traps on paths between food sources and burrows/nests



# ***A quick look at other Nuisance Wildlife:***

## **Woodchucks**

Herbivores: perennials, flowers & vegetables

Good climbers

Stay within ~50 feet from dens, except in mating season

Dig burrows 10-60' long, 2-5' deep with multiple entrances

Best practices

- Find and block burrows
- Eliminate brush piles and overgrown areas
- Exclusion: 4' fence, loosely attached, with L at base or 10-12" deep
- Live traps (but cannot move elsewhere)



# ***A quick look at other Nuisance Wildlife:***

## **Voles**

- Eat bark, roots and grasses
- Create surface trails, occasional burrows

## **Moles**

- Eat insects and invertebrates, seeds
- Create extensive tunnel systems

## **Management Best Practices**

- Landscape modification (less cover)
- Proper mulching (not at trunk)
- Trapping (snap or harpoon)
- Trunk protection for voles
- Sheet metal barriers for moles, 12" deep and bent L



# ***A quick look at other Nuisance Wildlife:***

## Birds

- Geese, Ducks and Swans
  - Need open water for roosting, nesting and feeding
  - Prefer open spaces for safety
- Woodpeckers
  - Feed on insects
  - Build hollows for nests
  - Mostly beneficial
- Crows,
- Best Practices
  - Act promptly and persistently
  - Discontinue any feeding
  - Utilize auditory and visual frightening devices
  - Physical exclusion – netting, hardware cloth
  - Habitat modification – ponds with steep banks, shrubs or tall grass, limited views





## ***A quick look at other Nuisance Wildlife:***

- Skunks
  - Omnivores: seeds, insect, grubs, poultry
  - Also enjoy pet food and garbage
  - Crawl under fencing, do not climb well
  - Best Practices
    - Exclusion
    - Remove food sources
    - Remove debris / sheltering areas
    - Eliminate rodents
    - Call a professional

