



# Great Lakes Fruit, Vegetable & Farm Market EXPO Michigan Greenhouse Growers EXPO

December 5-7, 2017

DeVos Place Convention Center, Grand Rapids, MI



## Wildlife Damage Management

**Where:** Gallery Overlook (upper level) Room G

This session will provide resources to assist growers in mitigating wildlife damage on the farm, delivered by representatives of Michigan DNR, USDA APHIS Wildlife Services and an innovative Michigan grower.

**MI Recertification credits:** 2 (COMM CORE, PRIV CORE)

**CCA Credits:** PM(2.0)

**Moderator:** James DeDecker, Extension Educator, MSU Extension, Rogers City, MI

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|----------|--|
| 9:00 am  | Wildlife Damage Management <ul style="list-style-type: none"><li>• Tim Wilson, Wildlife Biologist/District Supervisor, USDA Wildlife Services, Okemos, MI</li><li>• Nik Kalejs, Wildlife Biologist for Muskegon, Ottawa and Kent Co., Michigan DNR</li></ul>   |
| 10:00 am | Tricks and Tips for Wildlife Damage Management from A Grower <ul style="list-style-type: none"><li>• Larry Eckler, Owner and Manager, Eckler Farms</li></ul>   |
| 10:30 am | Wildlife Damage Q&A <ul style="list-style-type: none"><li>• Tim Wilson, Wildlife Biologist/District Supervisor, USDA Wildlife Services, Okemos, MI</li><li>• Nik Kalejs, Wildlife Biologist for Muskegon, Ottawa and Kent Co., Michigan DNR</li><li>• Larry Eckler, Owner and Manager, Eckler Farms</li><li>• Erin Lizotte, Integrated Pest Management Educator, MSU Extension, Cadillac, MI</li></ul> |
| 11:00 am | Session Ends   |

Slide 1

**Wildlife Damage Management on Farms:  
Options and Regulations**



Tim Wilson  
USDA Wildlife Services

Nik Kalejs  
Michigan Dept. of Natural Resources



United States Department of Agriculture  
Animal and Plant Health Inspection Service



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Slide 2

**Focus of presentation-**

- Identify which wildlife species require permits for control
- Identify regulatory agencies
- Identify appropriate permits



United States Department of Agriculture  
Animal and Plant Health Inspection Service, Wildlife Services

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Slide 3

**Types of Damage - Avian**



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Slide 4

**Types of Damage - Mammalian**

- Deer
- Raccoons
- Woodchucks



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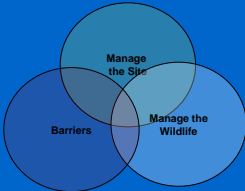
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Slide 5

**Control Strategies**



There is no magic bullet! The best solution is often a combination of strategies.

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Slide 6

**Control Methods**

- **Manage the Site**  
Alter the site to make it less attractive to birds
  - Reduce unused perching locations
    - Trees used for staging
  - Reduce locations that provide shelter
    - Conifer trees or little used buildings
  - Eliminate water sources
    - Leaking irrigation



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Slide 7

**Control Methods**

- Manage the Site
- **Barriers**
  - Netting, grid lines
  - High initial cost
  - Maintenance
  - Long-term solution



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Slide 8

**Control Methods**

- Manage the Site
- Barriers
- **Manage the wildlife**
  - Controlling the wildlife population by:
    - Non-lethal harassment
      - Anything to frighten wildlife from site
    - Lethal control
      - Use of firearms to reduce local wildlife populations



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Slide 9

**Manage the Wildlife: Non-lethal harassment\*\***

- Chase – vehicles, ATV's, dogs
- Pyrotechnics
- Distress calls
- Chemical repellents
  - Avipel (formerly Avitec) – taste repellent – sandhill cranes
  - Methylantranilate – taste repellent – Canada geese
- Mylar tape
- Predator effigies

\*\*Implement as soon as birds appear



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Slide 10

**Control Methods**

- Manage the site
- Barriers
- Manage the wildlife
  - Lethal control
    - Non-protected vs. protected species



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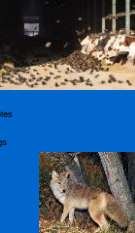
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Slide 11

**Control Methods**

- Manage the site
- Barriers
- Manage the wildlife
  - Lethal control
    - Firearms
    - Trap & euthanize
      - Foot-hold traps, snares – control of coyotes
    - Toxicants
      - DRC 1339, Starlicide – control of starlings



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Slide 12

**Regulatory Authority - Wildlife**

Federal management (U.S. Fish & Wildlife Service)

- Migratory game birds & non-game birds
  - Waterfowl, owls, raptors, herons, cranes, gulls

State management (Michigan Dept. of Natural Resources)

- Non-migratory game birds
  - Turkeys
- Canada geese
- Mammals

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Slide 13

### Migratory Bird Treaty Act

U.S. Fish & Wildlife Service regulation that protects migratory birds

Authorizes USFWS to issue permits for the taking of damage-causing migratory birds

A depredation permit is required before any person may take, possess, or transport migratory birds for depredation control purposes.

NO PERMIT is required merely to harass depredating migratory birds other than T&E species or eagles



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Slide 14

### USFWS Depredation Permits

- Application Process
  - Call Wildlife Services for application
  - \$100 per year application fee
  - Landowner completes application then requests WS Form 37 from Wildlife Services before sending to USFWS for approval
  - Landowner receives permit from USFWS
  - Permit is good from April 1 thru March 31 of following year



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Slide 15

### Migratory Bird Treaty Act: Depredation Order - Blackbirds

No permit required to control :

- Blackbirds
- Cowbirds
- Grackles
- Crows



IF found committing or about to commit depredations upon:

- Valuable Trees
- Crops
- Livestock
- Wildlife



OR if large numbers create a health concern

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Slide 16

### State Managed Species

**DO I EVEN NEED A PERMIT?**  
 Certain Species do not require a permit

- Opossum, porcupine, weasel, red squirrel, ground squirrel, skunk, woodchuck, feral swine, and feral pigeons may be taken year round with a valid hunting license.
- Coyote and raccoon may be taken year round if they are doing or about to do damage on private land




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Slide 17

### DNR Permits

**Who do you call?**

- Deer, turkey, beaver, fox, mink, badger, muskrat, fox and gray squirrels, and rabbits
- Contact DNR Customer Service Office to speak with biologist
- [www.michigan.gov/dnr](http://www.michigan.gov/dnr)







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Slide 18

Species	No Permit	DNR Permit	USFWS Depredation Permit
<b>Birds</b>			
Starlings, crows, grackles, blackbirds, pigeons, house sparrows	X		
Canada geese, turkeys, mute swans, pheasants, quail		X	
Migratory birds (great blue herons, sandhill cranes, trawls, gulls, waterfowl, etc.) except Pesticided & endangered species and eagles			X
<b>Mammals</b>			
Coyotes, raccoons	Can be taken year-round on private land when they are doing or about to do damage to private property		
Deer, fox, bear, mink, beaver, muskrat, squirrel, badger, rabbit		X	
Opossum, porcupine, weasel, red squirrel, ground squirrel, feral	Can be taken year-round with a valid MI hunting license		

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Slide 19

**Contacts**

- USDA Wildlife Services
  - Technical assistance
  - Application for USFWS Depredation Permit
  
- Dept. of Natural Resources
  - Technical assistance
  - Permits for furbearers, game species, Canada geese, turkeys

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Slide 20

**Questions**

- Tim Wilson  
USDA Wildlife Services  
517-336-1928 ext. 26  
[timothy.s.wilson@aphis.usda.gov](mailto:timothy.s.wilson@aphis.usda.gov)
  
- Nik Kalejs  
Michigan Dept. of Natural Resources  
231-788-5055  
[Kalejsg@michigan.gov](mailto:Kalejsg@michigan.gov)

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# Wildlife Damage Management

Larry Eckler, owner Eckler's Produce & Greenhouse  
1879 Barron Lake Road, Niles, MI 49120-9391  
office phone: 269-683-2509

Recognize the pest you have by the animal tracks and types of damage.

Bird types: Crows, Grackles, Starlings, Cedar Waxwings, Black birds, geese, Sand Hill cranes to name a few.

Animals: Raccoons, squirrels, opossums, coyotes, deer, woodchuck

How to manage the damage.

## Bird Deterrents

Birds like crows stay clear of fake owls if suspended high enough.

They fear the silent swoop of the owl. Most of ours are on poles 35' - 40' high. The fake owl will also deter starlings and early on Cedar Waxwings and Black birds.

Use of Mylar reflective tape works as well.

The use of predator bird sounds work with the fore mentioned deterrents.

Shirt displays (see below in deer section) work for geese and sand hill cranes.

Live traps for small animals - make it more sensitive with a 10" wide by 12" long board set on the trip pad

Raccoons use marshmallows in, on, and under traps

Squirrels use ear corn and nuts

Woodchuck use apples, lettuce, or cantaloupe all cut in pieces

For Rabbits use fake owls up high

Deer we use several high tech, low cost devices

Solar red driveway markers that come on at dusk and glow red. Set two of them wide enough to make it look like car tail lights or close enough to look like coyote eyes.

Hang white tee shirts on two stakes 6 feet high, use mylar tape to hang out the sleeves. Use cheap cologne to spray on the shirt and near fence line trees.

Battery powered drive way alarms work. Protect the parts the are now weather proof.

At night use of solar motion detector lights help too.