Nuisance Wildlife, Vertebrate Pest Control, and Africanized Honey Bee Recommendations

28th Annual Florida Master Gardener Continued Training Conference

Dr. William Kern, Jr.
EFFECTIVE: July 1, 2008.

• 68A-9.010 Taking Nuisance Wildlife.
• Any person owning property may take nuisance wildlife or they may authorize another person to take nuisance wildlife on their behalf except those species listed in subsection (1) below on their property by any method except those methods listed in subsection (2) below. Persons responsible for government owned property are considered “landowners” for the purpose of this rule. The executive director or a designee may authorize the take of additional species of wildlife or additional methods of take for justifiable purposes by permit issued pursuant to 68A-9.002 F.A.C.
1) Wildlife that may not be taken as nuisance wildlife:

• (a) Species listed in Chapter 68A-27 F.A.C. (Endangered or Threatened species)

• (b) The following mammals:
  – 1. Black bear.
  – 2. Deer.
  – 3. Bats -
Bats

Except that bats may be taken either when:

- a. That take is **incidental to the use of an exclusion device**, a device which allows escape from and blocks re-entry into a roost site located within a structure at **any time from August 15 to April 15** or

- b. That **take is incidental** to permanent repairs which prohibit the egress of bats from a roost site located within a structure **provided an exclusion device** as described in sub-subparagraph a. above is used for a minimum of four consecutive days/night for which the low temperature is forecasted by the U.S. National Weather Service to remain above 50°F prior to repairs and during the time-period specified.
1) Wildlife that may not be taken as nuisance wildlife:

- (c) The following birds:
  - 1. All birds listed in 50 C.F.R. §10.13 (as protected by the Migratory Bird Treaty Act unless the take is authorized by the U. S. Fish and Wildlife Service by a permit or depredation order).
  - 2. Bobwhite quail.
  - 3. Wild turkey.
(2) Methods that may not be used to take nuisance wildlife:

• (a) Gun and light, except as provided in paragraph (4)(b) below.
• (b) Steel traps.
• (c) Poison, other than those pesticides that are registered by the Florida Department of Agriculture and Consumer Services without additional authorizations and are only used in a manner consistent with the product labeling.
• (d) Bat exclusion devices or any other intentional use of a device or material at a roost site which may prevent or inhibit the free ingress and/or egress of bats from April 16 through August 14.
(3) Transportation and release of nuisance wildlife.

• (a) Live captured nuisance wildlife transported under authority of this section **may be done only for the purpose of euthanizing the nuisance wildlife**, provided any euthanasia shall be humane as defined by the American Association of Zoo Veterinarians. Euthanasia of those species listed in 68A-6.0022(2) is not required.

• (b) Live captured nuisance wildlife may be released on the property of the landowner provided the release site and capture site are located on one contiguous piece of property.
Limited Certification for Commercial Nuisance Wildlife Management Personnel

• In 2008, the Bureau of Entomology and Pest Control began creating a new limited certification for Commercial Nuisance Wildlife Management personnel. This certification allows nuisance wildlife trappers to exclude, trap, euthanize vertebrate pests and nuisance wildlife, but may not use any chemical products such as rodenticides or avicides.
Bat Exclusion Season
August 15 to April 15

Bat Breeding Season
NO EXCLUSIONS
April 16 – August 14
Eastern mole
*Scalopus aquaticus*
Mole Control Options

• Tolerance
• Repellents – Castor oil emulsions
• Traps
  – Live pitfall traps.
  – Lethal traps – choker loop, harpoon, cinch, etc.
• The use of poisons registered with FDACS to kill moles is now legal by homeowners and Pest Control Operators, as of July 1, 2008.
Harpoon and Choker Loop Mole Traps
Southeastern Pocket Gopher
*Geomys pinetis*
The surface piles of excavated soil give pocket gophers the name “Sandy-Mounder”.
Pocket Gopher Control

• Tolerance – just knock down the mounds.
• Exclusion – underground fences to protect root crops and ornamentals in the garden.
• Traps
  – Live stovepipe traps.
  – Lethal traps – choker loop, cinch, etc.
• The use of poisons registered with FDACS to kill pocket gophers with is legal by homeowners and Pest Control Operators, as of July 1, 2008.
Rodents

- Roof rats
- Norway rats
- House mice
• “To minimize children’s exposure to rodenticide products used in homes, EPA is requiring that in the future, all rodenticide bait products available for sale to general consumers be sold only in bait stations. A range of different types of bait stations will meet the new requirements, providing flexibility in cost.”

• “To reduce wildlife exposures and ecological risks, the Agency intends to prevent general consumers from purchasing bait products containing the rodenticides that pose the greatest risk to wildlife (the second generation anticoagulants – brodifacoum, bromadiolone, difethialone, and difenacoum) by requiring various measures to control sales and distribution. These new requirements support EPA’s goal of preventing the sale of the second generation anticoagulants on the general consumer market, but will not change how the livestock industry or other professional applicators use rodenticides.”
Rodenticide Changes

• EPA has classified all bait products containing the single-dose anticoagulant active ingredients brodifacoum, bromadiolone, and difethialone as restricted use pesticides

• EPA is proposing to require that all outdoor, above-ground placements of bait products containing second-generation anticoagulants be contained in tamper-resistant bait stations

• EPA has required that any rodenticide bait product available for sale to a consumer must be sold in a tamper-resistant bait station, with solid bait blocks as the only permissible bait.
Papaya
Mango

Doug Caldwell
Oranges still on the tree
That’s R-A-T not B-A-T.
Meyers Lemon Peeled
Christmas Palm
Veitchia merrillii
Queen Palms
Syagrus romanizoffiana
Coconuts
Roof Rat Control

- Exclusion and prevention.
- Habitat modification
- Snap traps
- Glue traps and Live traps.
- Poison Baits in Tamper-Resistant Bait Stations (the last option for an occupied structure).
Screen Sewer Stacks
Snap Traps are Humane and Effective
Trap Stations
Rat Trap Secured to Conduit, Pipe, or Rafter
Electrocution Rodent Trap
Tamper-proof Bait Stations
Roof Rat Control
Green Iguana
*Iguana iguana*
Iguana Options

- Tolerance – Don’t Feed Them
- Harassment - scare them away often
- Electric Fence or Exclusion Cage
- Live Trap – baited with ripe fruit.
- Snare
- Shooting is usually not an option because most Iguanas are in suburban/residential areas.
- Capture by hand or noose
Live Trap for Iguana
Noosing Young Iguanas
Snares for Iguanas

- Support stake
- Guide stakes
- Secured stake
- 2-3 inches
Burmese Python

- Native to SE Asia
- Size to 24 ft.
- Released pets now established in Everglades National Park.
- Eat any animal up to size of deer and alligators.
NINE-BANDED ARMADILLO

Dasypus novemcinctus
Trapping Armadillos Is Easy!
Raccoon, *Procyon lotor*
Powerful, adaptable, clever
Raccoon Problems

• Can be a nuisance around the landscape.
  - Getting into garbage cans looking for food.
  - Denning in attics, sheds, etc.
  - Digging holes in turf areas and plant beds looking for earthworms and turtle eggs.
• They are a potential vector of Rabies and Distemper in the Southeast.
Live-trapping and Relocation of Raccoons is Rarely an Option
Raccoon Control Options

• Don’t feed raccoons. *It is illegal*. This creates un-naturally high local populations. Don’t leave pet food out at night.

• Tolerance. A raccoon does not need to be trapped and removed because you see it on your course.

• Exclusion. Electric fences on the ground or on top of wooden privacy fences stops raccoons from entering areas.

• Cover steps of pool with plastic sheeting to prevent raccoons from defecating in the pool.
Feral Domestic Waterfowl

- Muscovy ducks
- Non-migratory Mallards (summer)
- Peking ducks (white mallard)
- Chinese and African geese
Domestic Ducks, Geese, and Swans
Problems with Non-native Waterfowl

- Geese and swans are effective grazers and don’t differentiate between weeds and landscape plantings and flowers.
- Both ducks and geese produce about ½ lb. of manure per day. This causes public health, wildlife health, water quality, and esthetic problems.
- Feral domestic ducks can hybridize with native desirable ducks, like Florida’s Mottled duck.
Control of Feral Waterfowl Problems

• Discourage feral waterfowl – harassment.
• Don’t feed them.
• Reduce populations by finding the nests and
  – Shake the eggs and return them to the nest.
  – Replace the eggs with plastic eggs.
  – Remove all but one or two of the eggs.
  – Removal of all the eggs just causes the hen to lay a
    new clutch.
• Catch them on your property and sell or eat
  them.
• Feral livestock belongs to the property owner.
Unprotected Exotic Birds

- English Sparrows (House Sparrows)
- European Starling
- Common Myna, Crested Myna, Hill Myna
- Numerous Parrots 44 present +3 established
- Red Whiskered Bulbul
- Eurasian Collared-Dove
- Spot-breasted Oriole
- Others in small local populations
Feral Domestic Birds

- Feral Chickens
- Feral Peafowl
- Feral Guineas
- Feral Pigeons
Peafowl
Plants Heavily Damaged by Peafowl

- Impatians
- Tomatoes and Peppers
- Red salvia, Datura, Burgmansia, Begonias, Petunias, Gazanias, Dianthus, Echanacia, Rudbeckias, Lilies, Pellitory, Spiderwort, Purslane, Portulaca, Carnations, Pansy, Liriope, Orchids, Nasturiums.
Peafowl Control

• As feral livestock, feral peafowl belong to the property owner and can be trapped, caught, and sold.

• If they are trespassing livestock, the damage they cause is the legal responsibility of the owner.

• **WARNING**: Some local governments have passed ordinances to protect peafowl and other domestic birds. While this may be unconstitutional, you don’t want to fight it to the State Supreme Court.
Are These Africanized Honey Bees?
Meter and Valve Boxes
EHB never nest underground
2 month old AHB Aerial Nest
AHB Colony between Buttresses of Trunk of Tree
Surprise AHB Nesting Site
Stronger Brood Production

Faster Colony Growth

AHB Choice of Smaller Colony Locations

More Frequent Swarming and Absconding

Many More Feral Colonies = More Danger of Contact
10 Times as Far and 10 Times as Many

EHB

30 yds. (m)

AHB

300 yds. (m)
What do you do if you disturb an AHB colony?

• Run, Run, then Run some more!
• Get inside a closed vehicle or structure.
  – The 10 bees that come inside with you are much less dangerous then the 3,000 waiting outside.
• Do not jump into a pool or pond.
  – They can wait longer than you can.
What you can do to protect yourself, family and pets.

• Inspect your property regularly for large numbers of bees and colonies.

• If feral colonies are found, have them destroyed by trained Pest Management Professionals who are knowledgeable about AHB.

• Disturbing a defensive colony by untrained personnel could endanger people and pets up to 150 yds away from the colony.
Bee Removal

• The FDACS does not recommend the capture and relocation of honey bee swarms or feral colonies.
• It is not illegal for a beekeeper to catch a swarm, put it in a hive, and re-queen the colony with a marked queen of known lineage.
• It is illegal to keep Africanized honey bees in Florida.
Bee Removal

• Lists of Pest control operators that have received training on dealing with Africanized Honey bees is available at:
  • http://afbee.ifas.ufl.edu/bee_removal.shtml
  • http://afbee.ifas.ufl.edu/index.shtml
  • http://afbee.com
  • http://www.doacs.state.fl.us/pi/plantinsp/ap iary/PCO_removal_list.xls
Swarm on a Building
Never Use Wasp and Hornet Spray on Bees
OOPS! You Will Get Stung!
Danger Zones

150 ft

150 yds.