

NUISANCE ANIMALS

A Public Service Advisory

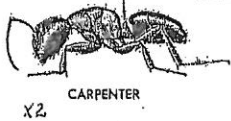
The Churchill Area Environmental Council

2300 Wm. Penn Highway, Pittsburgh PA 15235 Spring, 2004

All creatures are part of an ecological web that is interdependent and interconnected. As humans we do not like to share our "space" with rats, roaches, or rattlesnakes, but sometimes we use control measures that exceed the danger these animals present (e.g. dangerous, persistent pesticides). This leaflet offers ideas for avoiding or dealing with those animals that are of public health concern in our area, with some cautions for travelers. Information on other pests is in the leaflet "Pests in Perspective" available at your municipal office.

INSECTS:

Ants – Most native species are not harmful but can be seasonal nuisances.



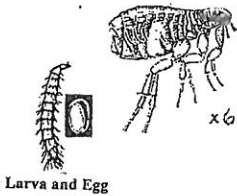
- **Indoors:** Caulk crevices and cracks; sprinkle chili powder around entry areas; Use pyrethrin sprays (labeled "for indoor use") for persistent problems.
- **Outdoors:** Pour boiling water on nests; if necessary, sprinkle pyrethrin, propoxur or diazanon in nest openings.



Fleas – Wingless, hard-bodied, tiny, jumping insects on cats, dogs, rats and rabbits.

Bites result in itchy, raised, red spots with a single, central puncture point. Fleas transmit bubonic plague from rodents to humans and can transmit tapeworms to dogs and children if they ingest flea parts.

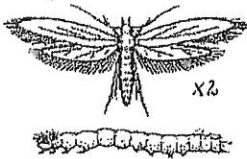
- Treat bite areas with carbolated Vaseline, menthol, calamine lotion or ice.
- Repellents containing DEET are protective.
- Dogs should be protected with Advantix or Frontline (available from veterinarians).
- Practice strict sanitation, including beater-bar vacuuming around pet resting areas.



Flour beetles and moths

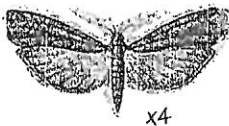
Clothes moths have larvae that "graze" on woolens, furs, and other organic materials.

- Dry clean or launder infested items in hot water (120°F/30 minutes).
- Beat and brush small rugs; treat large rugs with pesticides labeled for indoor use.
- Vacuum thoroughly under furniture, along baseboards, in closets and around vents.
- Store clean, susceptible items in airtight containers. The value of aromatic cedar is temporary and moth balls (paradichlorobenzene) are TOXIC.



Pantry moths and beetles infest grains and grain products (pasta, cake mixes, cereal). Eggs may be brought home in bulk foods. The larvae create unsightly, loose webbing.

- Set up Moth Traps (available at hardware stores) that use pheromones to trap adults.
- Empty all cabinets and drawers. Discard food items that are infested. Vacuum thoroughly; then wash all surfaces with detergent; rinse; dry completely.
- Store grains and pastas in glass containers with tight lids.



Mosquitoes - Females can transmit encephalitis, West Nile virus, yellow fever, dengue fever and malaria.

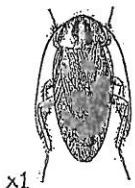
Prevention is the best approach to mosquito-borne illness:

- Vaccines are available for several mosquito-borne illnesses. Travelers should check with the Allegheny County Health Department to determine the best precautions.
- Wear socks, long pants and long-sleeved shirts outdoors.
- Apply a repellent containing 35% DEET (e.g. Deep Woods OFF; Sawyer Controlled Release) to exposed skin; wash off upon returning indoors.
- Eliminate mosquito breeding water, e.g., stored tires, clogged roof gutters, kiddie pools, saucers under plants, children's toys.
- Use mosquito "DUNKS" (available at garden supply stores) containing Bt (*Bacillus thuringiensis*) in all un-aerated water and bird baths or change water every 3-4 days.
- Drill holes in bottoms of gardening containers; drain water from flat roofs.



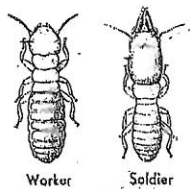
Roaches

- Remove accessible food sources and caulk all entry crevices.
- Mix boric acid with a little powdered sugar; sprinkle around baseboards and cupboards. Vacuum and replace weekly.



Termites, Carpenter Ants – Sawdust piles may be indicators of their presence.

- Seek reliable, professional help and get at least two independent opinions.
- Have specimen insects professionally identified (see **Resources** below).



Wasps, yellow jackets, hornets, honeybees, fire ants

Stingers inject chemically complex venom. People may have allergic reactions including severe swelling and even death. If advised by an allergist, carry an anti-histamine or epinephrine "pen" for emergency use following a sting.

- Use salt water or meat tenderizer on the sting site to break down the venom.
- Take ibuprofen as an anti-inflammatory.
- Never disturb or remove active insect nests without professional help.

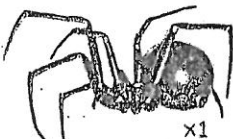


ARACHNIDS: They have 8 legs as opposed to insects that have only 6 legs.

Spiders – Almost all can bite; only two groups inflict harmful, venomous bites:

Widow spiders: up to 1.5" long, our northern species is notable for the orange/red hourglass shape on its abdominal underside. Widow spiders are rare indoors; they live under stones, steps and decks near dwellings. The female's bite produces sharp pain, muscle cramps, weakness, tremor, clammy skin, delirium.

☐ Treatment includes calcium gluconate and antiserum. Consult a physician.



Brown recluse: approx. 1” long, with a distinctive arrangement of three pairs of eyes.

This shy, nocturnal feeder may bite when someone disturbs clothes or bedding in which the spiders hide. The bites produce pimple-sized swellings, followed by tissue destruction, deep scarring, and, in rare cases, kidney damage and death.

- Employ good housekeeping, frequent vacuuming, elimination of stored rubbish.
- See a physician promptly if symptoms described above begin to develop.

Ticks – These are small, disease transmitting, external parasites.

American dog tick: The primary carrier of Rocky Mt. Spotted Fever virus and the tularemia bacterium. Larvae and nymphs feed mainly on dogs but also bite humans. Adults are active from April to September in fields and forests. Symptoms of Spotted Fever include a rash on ankles, wrists and forehead one to two weeks after the bite.

Deer tick: The major carrier of Lyme disease and babesiosis in the northeast. These tiny ticks infest forested or brushy areas. All stages bite humans, although adults feed primarily on deer. Larvae are active July-Sept. on mice; nymphs May-Aug.; adults Oct.-May. Onset of **Lyme bacterial disease** is usually characterized by a large, red rash with a clear central area (bullseye) one to two weeks after a tick bite. Joint pain and flu-like symptoms are also common. In these early stages antibiotic treatment is very effective. **Babesiosis**, also carried by deer ticks, is a lesser known, protozoan disease similar to malaria. Tick diseases are transmitted after the tick feeds for several hours.

- Inspect all parts of the skin carefully after returning from tick areas.
- To remove a tick, grasp it with tweezers close to the skin and pull it into a piece of sticky tape; save the specimen for a physician should you become ill. Do not rupture the tick.
- Wear light colored clothing so ticks are visible. Use repellents containing DEET.
- Products for repelling and killing ticks and fleas on dogs include Frontline and Advantix (the latter also repels and kills mosquitoes).

Mites – These tiny, widespread arachnids include the **scabies** or itch mite, **chiggers**, and dust mites that can cause itching, allergies, or serious tissue damage in humans. Scabies mites burrow into skin, feed on tissue fluids and lay eggs in the burrows. They are contagious among people and between people and dogs. Seek a physician’s help for suspected scabies. Treatment involves washing all garments and bed linens in hot, soapy water and applying a prescription insecticide to the body.

- Use a repellent containing DEET outdoors and vacuum thoroughly and frequently indoors, paying special attention to upholstered furniture, mattresses and beds.
- Replace installed carpets with bare wood floors and small, washable, area rugs.

CENTIPEDES AND MILLIPEDES: These worm-like animals have one and two pairs of legs per body segment, respectively, making them look many-legged. They are not harmful, but centipedes capture insects and can bite, and millipedes can be malodorous.

- Spray a nicotine solution (tobacco “tea” or Black Leaf 40 pesticide) around entryways.
- Tolerate modest numbers; they tend to be seasonal and temporary.

BIRDS

Birds help control insect populations, but can also damage gardens, making noise and a mess. Crows get into trash bags; English sparrows, starlings, pigeons and others can appear in large, flocks. Many of these “pest” birds are not natives.

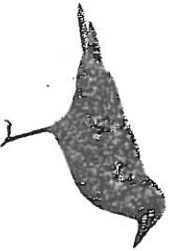
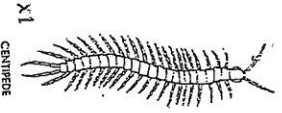
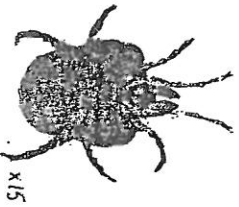
- Put all garbage bags in cans with secure lids.
- Frighten birds with plastic owls and other fake predators, repositioned from time to time.
- Cats and dogs will help chase birds to other roosting and feeding areas, but cats take a toll of song birds and are NOT recommended by birding organizations.
- Coat surfaces where birds sit with sticky Bird Tanglefoot.
- Use feeders with short perches and no catch platform. Never spread food on the ground. Place feeders and waterers in areas that give birds a 360° escape area from hawks. Take feeders down for a few days if hawks or rats are a problem. They will get hungry and move.
- Cover berries and fruits with cheesecloth during ripening.

Keeping caged birds as pets is NOT advised. Exotic pets of any kind should be avoided. Your purchase encourages the trapping and trafficking of rare species. Wild animals can transmit disease (herpes B virus in macaque monkeys, psittacosis rickettsia in parrots, and salmonella bacteria on reptiles). Physical harm and infection can result from the attacks and bites of adult animals. It is illegal to own certain animals.

- No sick or dead bird should be handled with bare hands.
- Use disposable gloves and paper when cleaning bird droppings.
- Call the Western Pa. Audubon Soc. (412-963-6100) for additional advice.

MAAMMAIS

These furry animals can transmit parasites such as trichinosis and tapeworm, and diseases like “mad cow” and **rabies**. **Rabies is a deadly infection** of the central nervous system caused by a virus in the saliva of infected warm-blooded animals such as raccoons, skunks, bats, dogs and cats (rarely in rabbits, squirrels, rats and opossums). Any mammalian bite should be regarded as a possible rabies threat. Medical advice should be sought immediately, and the offending animal should be caged until it can be tested for rabies. If the animal is not available for testing, rabies inoculations must be started for the victim. **For more information** consult “Health Matters,” a newsletter of the National Institutes of Health, U.S. Dept. of Health and Human Services, on “Rabies,” May, 2003. www.niaid.nih.gov/factsheets/rabies.htm





- Lists of deer-resistant plants are available from local extension services (see **Resources** below), government publications and local nurseries. However, except for poisonous species and most ferns, no plant is deer-proof. Over-fertilizing and over-watering stimulate foliage production in young plants, attracting deer to the abundant leaves. A database of deer resistant plants is at www.mydeergarden.com

Groundhogs – Also known as woodchucks, these rodents are susceptible to rabies and become aggressive if infected. They are active from March to November.

- Install garden fencing that is 3’ high and buried at least 6” deep.
- Live trap early in the season before females have litters. Use cut apples as bait.
- Seal up entrances to dens. Use heavy gauge welded wire, cut into 3’ sections and buried at least 1’ deep.

Mice and Rats – The presence of these rodents is, in part, related to human behaviors and living habits, e.g. home cleanliness, feeding of pets and birds, storage of garbage, weed/brush control and entry holes that are not closed or plugged. Rat infestations should be reported to your municipal office or the code enforcement officer of the Allegheny County Health Department (see **Resources** below). Some communities such as Forest Hills and Wilkins have individuals who have been trained by the ACHD to set out bait and advise residents on rat control methods. Contact those municipalities directly.

Moles – These mouse-sized insectivores have thick, velvety fur and pointy snouts. Raised tunnels created by burrowing moles can be a real nuisance for homeowners. Like skunks, moles are instrumental in keeping insect populations controlled.

- Mesh screen barriers can be inserted to a depth of 12” around garden plots.
- Repellents containing castor oil or castor beans as their active ingredient are effective.
- Habitat management practices:
 - Tamp down mole runs before moving to prevent equipment damage.
 - Water lawns less to prevent the insect grub infestations that attract moles.
 - Non-toxic grub control (products containing “Br”) will limit mole food sources.



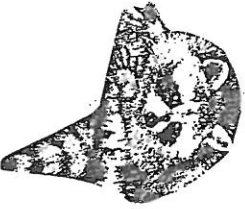
Rabbits - About 90% of a rabbit’s diet consists of grass, but they also love vegetables. They are subject to a bacterial disease called tularemia, which is fatal to the rabbit and can spread to humans when an infected animal is handled.

- Rabbits browse low to the ground, so fences 2.5’ high made of poultry wire are effective. To discourage burrowing, add an extension underground.
- Repellents like dried blood, Black Leaf 40 and Repel are at garden supply stores.
- Live (Havahart) traps can be used to capture rabbits humanely and relocate them.



Raccoons – These carnivores are carriers of diseases transmittable to humans and pets, including rabies, tuberculosis, canine and feline distemper, and parasites such as roundworm. They become aggressive when rabid, cornered or protecting their young. In the yard raccoons can be a nuisance as they seek shelter and dig or forage for food.

- Keep children and pets away from raccoons.
- Never leave pet food outdoors. Fasten garbage lids securely or put weights on top.
- Raccoons have a keen sense of smell so repellents are effective, including on lawns.
- Trapping raccoons is difficult and dangerous. Call your municipal office for advice.



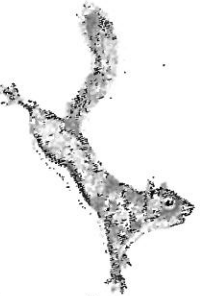
Skunks - Skunks are beneficial carnivores in the wild; insects comprise 70% of their diet. The major nuisance created by skunks is their spraying, a method of self defense used when the animal is startled or cornered and unable to escape.

- Tightly close garbage cans and clear yards of wood and rock piles.
- Close openings in houses with boards or wire mesh.
- Dig shallow trenches around foundations; line them with wire mesh placed vertically 1.5’ down and bending 6” out from the bottom.



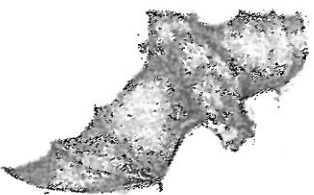
Squirrels - These rodents can be annoying creatures when they invade bird feeders or nest in attics and chimneys entered through roof vents, broken windows and construction gaps. Once inside they gnaw on boards and electrical wires (a fire hazard). During the day squirrels will venture outside to forage for food. They can become trapped in chimneys (creating a carbon monoxide danger). Do not try to smoke them out!

- Purchase squirrel proof bird feeders, suspend them from tree branches at least 4’ from the trunk, or, put the feeder on a metal pole. Use safflower seed (which birds like but squirrels do not) instead of sunflower seed.
- In the attic seal off entrance holes with sheet metal once the squirrel has left for the day. Extend the patch at least 6” beyond the hole in all directions to prevent the squirrel from gnawing around the outside. Listen carefully for overlooked, trapped animals.
- To remove a squirrel from a chimney throw a thick rope down the chimney as far as the damper. After the squirrel climbs out, cover the opening with a chimney cap.



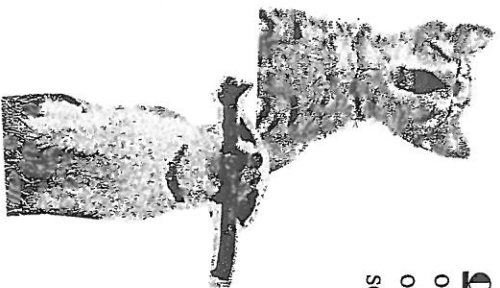
RESOURCES:

Allegheny County Health Department, Bill Todaro, entomologist, 412-350-4046 and Ihsan Chaudry, veterinarian, 412-578-8060. Free humane traps are available for up to two weeks for a \$75 deposit. Advice on baits and other management strategies are expertly given. Penn State Cooperative Extension of Allegheny County, located in Point Breeze at 400 N. Lexington St., 412-473-2540.



Bats –These nocturnal, flying mammals do not normally bite and are beneficial, feeding on insects. They can occupy building attics as daytime roosts or nurseries and fly in through cracks as narrow as a fraction of an inch. They will not damage the structure of the house; but their droppings (guano) are malodorous and corrosive. Bats can carry rabies, so it is wise to take precautions.

- Pesticides, mothballs, bright lights, loud music and ultrasound devices are **NOT** effective. Bats will leave on their own if you close all inside doors, windows and curtains; then open one outside door, placing a fan in the doorway so the airflow is directed out. Sleeping bats can be put in a pillowcase and set free outside.
- Check for cracks under loose siding, wall and roof joints, chimney flashing, gaps in fascia, etc. Block these in late November or December when bats have left.
- Install a bat house in the yard, away from the home. Plans are available: www.batcon.org

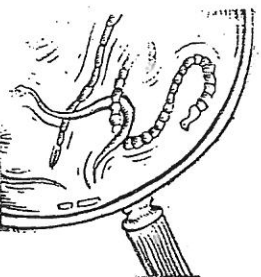


Cats and Dogs - These endearing animals can harm wildlife, especially birds, and they often stake out their territory by urinating or defecating in landscaped areas. They are sources of diseases transmittable to humans and domestic pets (see below). Stray dogs can inflict serious bites and carry rabies. Report them to your local police; do not approach them.

- Spay or neuter your pets to avoid overpopulation and annoying “in heat” behaviors.
- Take pets for **annual veterinary checkups**; vaccinations will be kept current, and stool samples will reveal parasites that can be treated with Sentinel, Interceptor, etc.
- Keep cats indoors for their own protection. If a cat must go outside, tie a bell around its neck to warn birds and other small animals.
- Conventional or electronic (“invisible”) fences keep dogs from straying off your property. Dogs must be on leashes when you walk them; dog owners must clean up after their pets to avoid contaminating soil and water with disease organisms. Repellents are available that discourage cats from digging in gardens.
- Live traps can be used to rescue and relocate stray cats. Contact an animal rescue organization first to ask if they will accept the trapped cat.

Aside from rabies, fungi and bacteria, **cats and dogs transmit several parasitic infections:**

- **Toxoplasmosis** – caused by a protozoan carried by outdoor cats and damaging to the human fetus. Clean litter boxes frequently (pregnant women should never handle cat litter) and feed cats commercial food (no wild animals or raw meats). Cook all meat thoroughly; wash fruits and vegetables; wash hands after outdoor activities.
- **Toxocarasis, heartworm, whipworm, hookworm** - all are roundworms that can be transmitted from pets to humans.
- **Flatworms** – Hydatid tapeworm, common in farm or ranch dogs, can enter humans, forming large, watery cysts in the head, easily mistaken for brain tumors. Dog tapeworm can infect dogs that ingest egg-carrying fleas.
- Never contact the oral or anal areas of pets by kissing or food sharing.
- Encourage frequent hand washing. If children develop a vague illness, be sure to tell the physician that there is a dog or cat at home.
- Clean up after pets; train children not to ingest soil or put hands to mouth outdoors.
- Cover sand boxes when not in use.



Chipmunks – These golden-brown mammals resemble small squirrels. They may burrow in flower beds, behind walls, and under porches, but their digging is usually not extensive enough to cause serious damage to plants or structures.

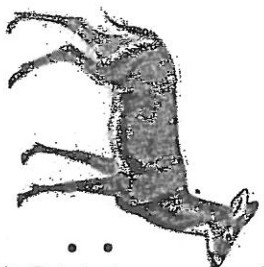
- Plant bulbs to sprout under a wire or plastic screen with 1”x 1” mesh.
- Set live traps, checking them often as chipmunks are nervous animals and can die if left overnight in a trap. Release in a public park at least five miles away.



Deer – Residential and commercial development, predator elimination, hunting restrictions, and forest cutting/thinning are responsible for burgeoning deer populations. Aside from their browsing effects on native and cultivated plants, deer are primary hosts for the adult stage of the deer tick – vector of Lyme disease and babesiosis (see TICKS above).

- Permanent fences, 8-10 feet high, work best, but may violate local zoning ordinances, and are not attractive or neighbor-friendly. Electrified fencing works well, but can be dangerous for children or pets. For information about deer and building a deer-proof fence, see:

“Problems with deer – What to do?” www.nationalgardening.com
 “Reducing deer damage...” Cornell Univ. Wildlife Program, Ithaca, NY 14853.
 “Wildlife pest control around gardens and homes”, Division of Agriculture and Natural Resources, Univ. of California, Oakland, CA 94608.



- Use plastic netting, floating row covers or wire cages around vulnerable plants.
- Plastic cylinders are for young trees, and need to be cut off as the trunk grows. Chemical repellents are expensive, labor-intensive, and can leave unsightly residues on foliage. Gardeners report good results with sulfur, human hair sachets, perfumed soaps and mixtures of rotting eggs, hot peppers and garlic (sold in garden supply stores as Shot-Gun or Deer Off). The USDA has approved granular Milorganite and Hinder as safe for edible crops. Other recommended repellents are Bobbeex, available at Trax Farms, Plantstkydd, a somewhat unsightly blood/oil product developed for tree farms, available at www.treeworld.com, TreeGuard, a precursor to novocain and Repellex, a bitter tasting benzoate (1-888-226-9226). For more information: www.gardensalive.com and www.organicgardening.com