

Rodents

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Outline

- What rodents are
- What they eat
- Where they live
- How to think like a rodent
- Prevention and control

Also known as...
ratones y ratas



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Rodents are health hazards

- Carry infectious diseases
- May cause asthma attacks
- Bite
- Damage food and property
- Can attract other pests
- Are repulsive



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What is a rodent?

A few types of rodents

- Rats
- Mice
- Squirrels
- Chipmunks
- Woodchucks

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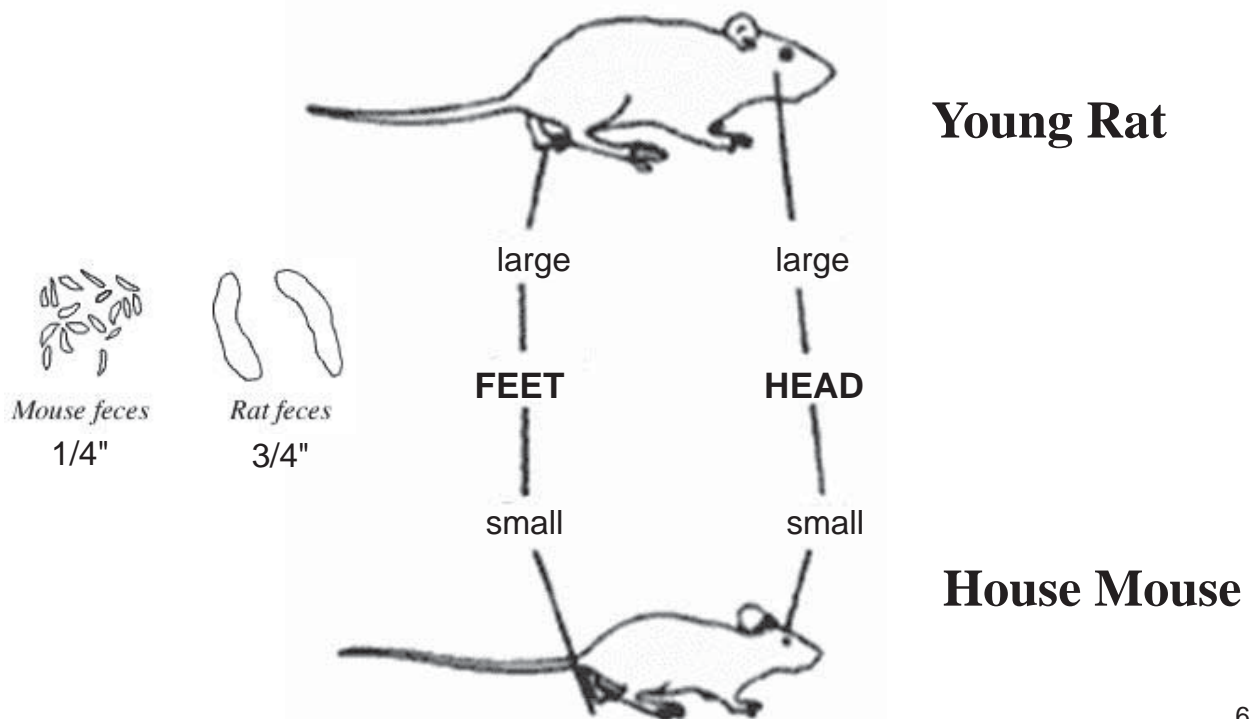
What is a rodent?

- Gnaw constantly to create holes and pathways (can cut wood, plastics, hoses, sheetrock, copper, wires, etc.)
- Are most active during the first two hours after dusk
- Make lots of babies fast
- Travel the same paths nightly, staying close to walls, or any items that give them cover.



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Rodent identification



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Rats

- Will travel up to 450 feet from their burrow, but prefer to live close to food and water sources
- Exterior infestations are usually associated with trash
- In high-rise buildings, rats will infest ceilings if the compactor chute is not kept in clean and in good repair
- Crawl spaces become infested if food trash collects along the exterior foundation

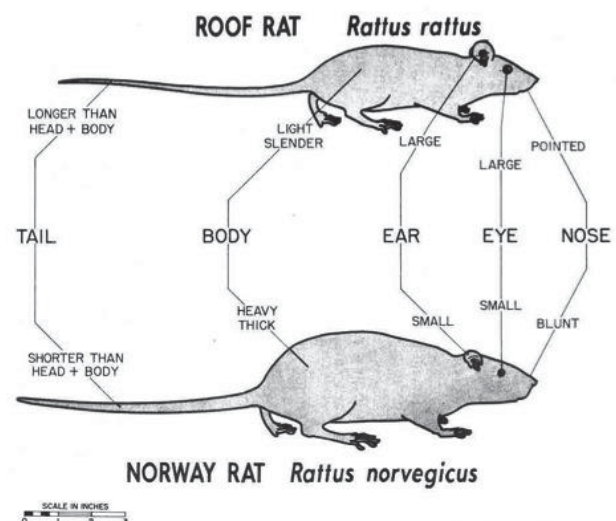


Norway rat burrow

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Rodent identification

- Roof rats nest up high
 - Occur in most coastal states South of Washington State and North to Maryland
- Norway rats nest within walls and ceilings or burrow in the ground outside
 - Occur throughout the U.S.



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Rats

- Need a hole the size of a quarter or a ½ inch crack beneath a door to enter



- Are very smart, cautious, and afraid of new things
- Require 0.5–2.5 ounces of food each day
- Need ~1 ounces of water every day

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Mice

- Breed rapidly
 - A single pair can become an infestation quickly!
 - Take action when evidence of ONE mouse is seen or heard



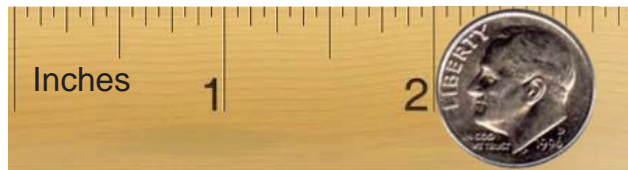
- They don't travel far—10-30 feet from their nest

One day old mouse pups

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Mice

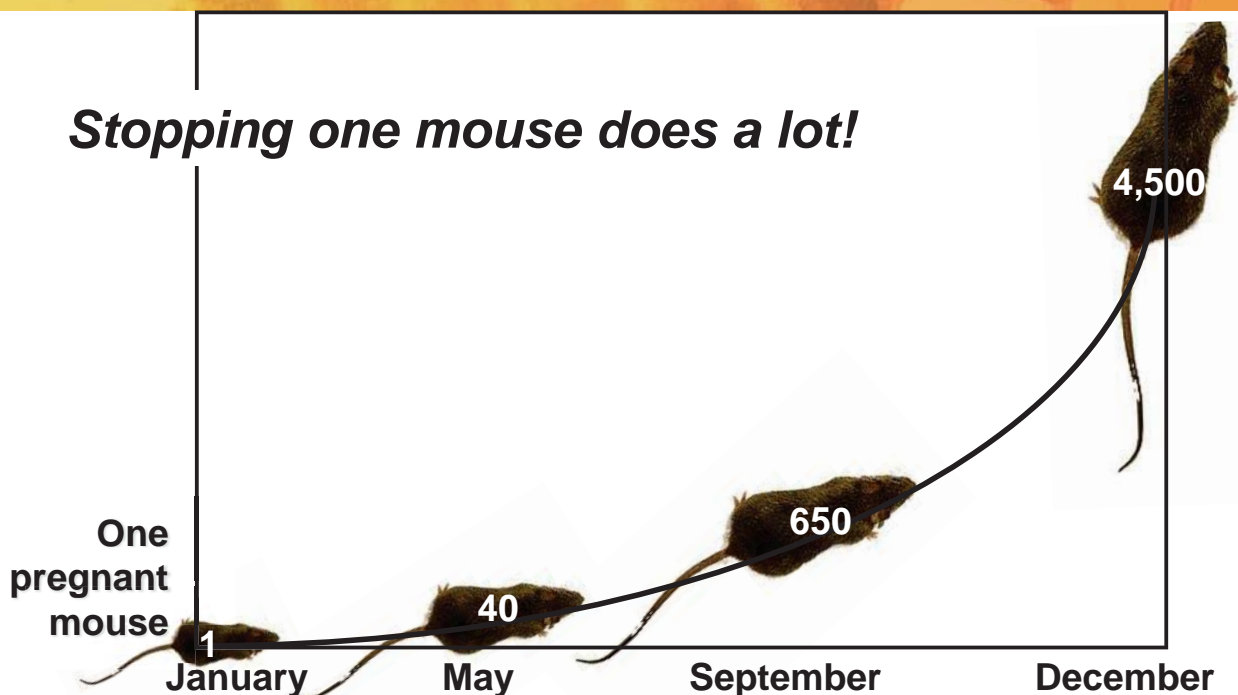
- Need a hole the size of a dime or a ¼ inch crack beneath a door to enter



- Mice are curious
- Require only ~1/10 ounce of food each day
- Don't need to drink water daily

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One mouse, one year...



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Signs of rodents

- Sightings
- Noise
- Gnaw marks
- Nests
- Rat burrows
- Droppings
- Dog or cat alerts
- Holes and rub marks
- Indicator pests

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Droppings and urine stains



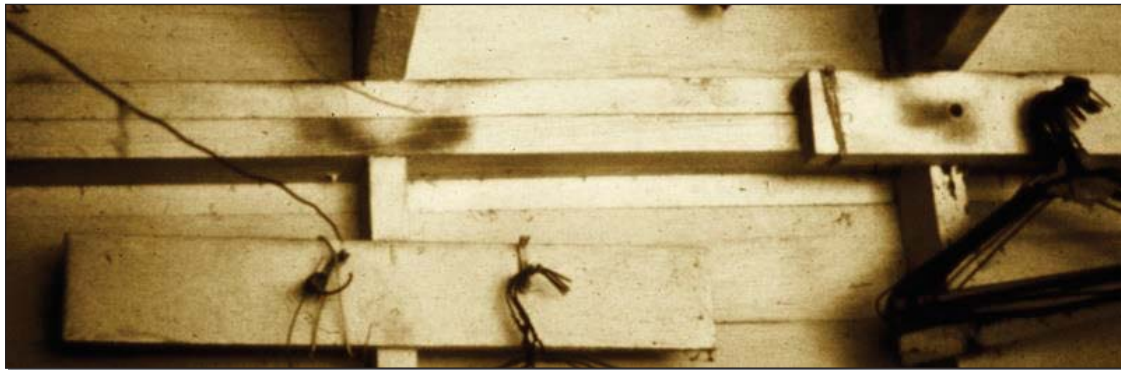
Rodent urine stain in drop ceiling



Mouse droppings by a power strip

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Holes and rub marks



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Indicator Pests

Found near
dead animals
or trash



Blow Fly



Hide Beetle

Found near
grain or bait
stored in walls



Indian Meal Moth



Grain Beetle

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What rodents eat and drink

Rodents eat

- Human and animal food available in the area
- Human garbage is a major food source

Rodents drink

- Rats drink ~1 ounce of water daily
- Mice can get the water they need from their food

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Where rodents live

- Rats: Outside and inside, depending on garbage handling situation—indoors they infest walls, ceilings, concrete hollow block walls, and other nooks
- Mice: Nest in walls, below refrigerators and stoves, in cabinets, closets, couches, stored cardboard boxes, or in the ceiling



Rat burrow by a wall



Mouse nest in a hat ¹⁸

Got rodents? Now what?

- There is not a single answer
- First find out:
 - Rat or mouse?
 - How many?
 - Where?
 - Why they are there?
- Then use solutions that provide:
 - Most effective prevention and control
 - Compatibility with people, pets, and other control measures

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Write in the IPM log

- Find out:
 - Rat or mouse?
 - How many?
 - Where?
 - Food Source?
- Record:
 - Date
 - Detailed observations
 - Action taken



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Prevention and control: Dumpsters

- Dumpsters should be
 - free of holes
 - covered
 - placed on cement
- Screen drain holes
- Empty dumpsters regularly; they should never overflow



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Prevention and control: Sanitation

Eliminate harborage, food, and water especially in any areas that are warm



Clutter in a corner

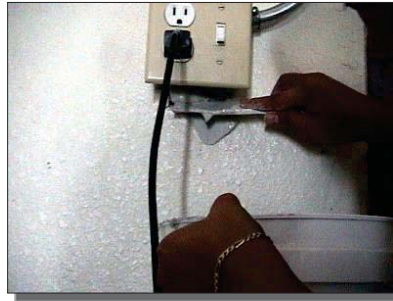
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Prevention and control: Exclusion

For a hole, crack, or gap...



Stuff it



Seal it



Check it often

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Prevention and control: Traps

- Effective and reusable
- More ARE better
- Check often
- **Placement is key**



Trap bounced away from the wall when it snapped

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Trap placement is key

Place the trap against the wall where rodents travel. (The bait side of the trap should touch the wall.)



Trap set correctly so it snaps towards the wall

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How to trap rodents

Bait with what they're eating or using to nest

Mice

1. Bait & set many traps
 - 6 traps for each mouse
 - At least 3' apart
 - May be set immediately, but will be more effective if left unset and re-baited for a day or two

Rats

1. Place many traps
2. Bait and leave UNSET until rats are readily feeding
3. Bait and set all traps

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Prevention and control: Targeted chemical use

- The label is the law
- Most rodent baits require tamper-resistant stations
- Read the label on both the station and the bait
- The bait station should be secured, locked, and labeled
- If the rodents are inside, consider using traps



An opened bait station
(only PMPs should open bait stations)

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A review of effective IPM tools

Sanitation—eliminate food source to eliminate the rodents

Exclusion—as important as sanitation

Traps—proper placement is critical

Rodenticides—last resort and not highly effective without sanitation and exclusion

How to eliminate a burrow

- Do not use loose rodenticide bait indoors. Rodents may carry the bait and put it where children and pets can get at.
- If using loose bait in exterior rat burrows, prevent rats from kicking out the bait:
 1. Use only bulk pellet formulations—NOT packet baits, block baits, or soft sachet baits
 2. Use a funnel to pour seeds into the burrow beyond the opening—at least 6 inches down
 3. A week after baiting, burrows that show no sign of fresh activity can be filled in
- **DO NOT:**
 - Stuff any packets into holes
 - Fill in burrows until rats are gone



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Questions?

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