



# MOLES!



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EXTENSION



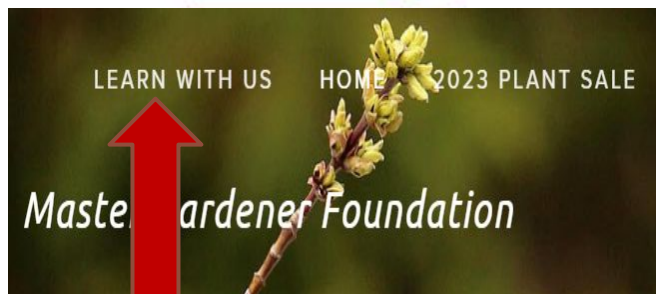
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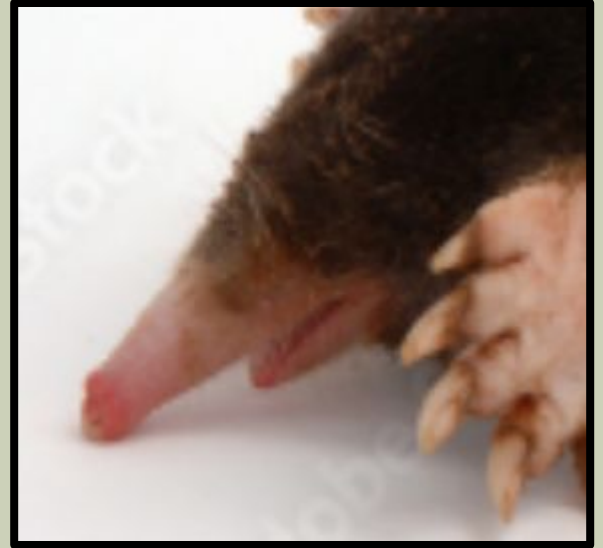
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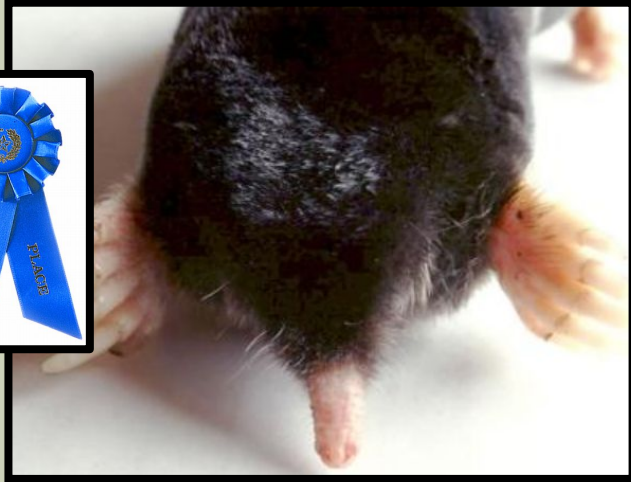
## A Few Quick Facts About Moles:

- ❖ Moles are mammals
- ❖ They are from a different order and family group than rodents
- ❖ They can dig up to 160 feet in one night alone
- ❖ Their mouths are **very small!**



# PNW has 3 kinds of moles

Townsend's



(*Scapanus townsendii*)

- ❖ Townsend's is the most common mole in Western Washington and Oregon
- ❖ About 8" long

(It is the **Largest Mole in North America!!**)

## The Pacific or coast mole



(*S. orarius*)

It can be found along the coast and in areas of southeastern Washington and northeastern Oregon.

It prefers drier, better-drained soils than the Townsend's mole.

# The California or broadfooted mole



(*S. latimanus*)

Found in south central Oregon.  
(Also- highly photogenic!)



Vole



Mole



Pocket Gopher

**Voles:** are smaller,  
Make and use tunnels  
(also, they use the  
tunnels made by moles!)

**DO eat plants**

**Moles:** are larger, make  
volcano-shaped dirt  
mounds, and **MOSTLY** eat  
invertebrates like earthworms

**Gophers:** largest, have *Big  
Teeth*, make crescent mounds,  
& **pull plants underground!**



# Some Information on Voles

How can you not  
love that face?

Here is why:



# Voles make shallow tunnels & they eat plants:



□ Sedums with roots eaten by voles

They sometimes use mole tunnels

***[And love to let moles be blamed for plants being eaten!]***

Gopher mounds are different than mole hills:



Crescent shaped, with a plugged hole

# Mole Hills.



**WOW. That's a LOT of mole hills.**

**How many moles made all those mounds?**



**Just  
ME!**

(Usually)

Moles are solitary--(except when breeding or raising young moles). Their burrows have limited overlap with other moles' burrow systems.

Some Mole Statistics:  
In a “city block” sized area,  
Usually about 1 male mole  
Or 2 female moles.



Density varies:  
From 1 adult mole per acre

To 5 or more per acre



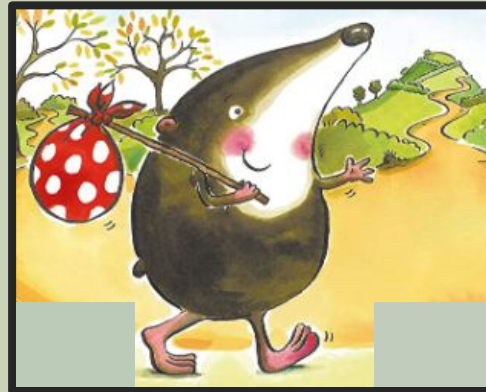
# Mole Breeding Season

Early winter to early summer

Usually 3-5 young



Once the young are weaned, they move out.





# Where do the Young Moles go?

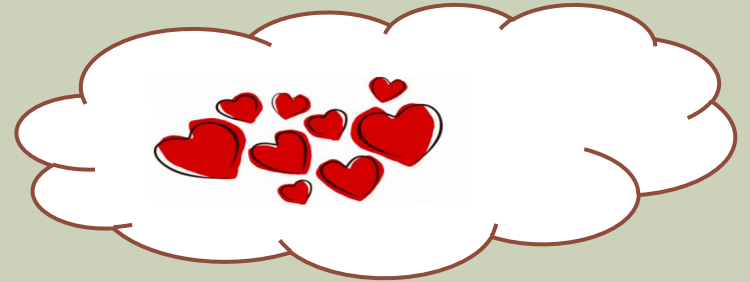


- They go above ground
- Make new territories about 30 yards away

- Sexually mature at about 10 months old
- Breed the first winter! **Woo Hoo! More Moles!**

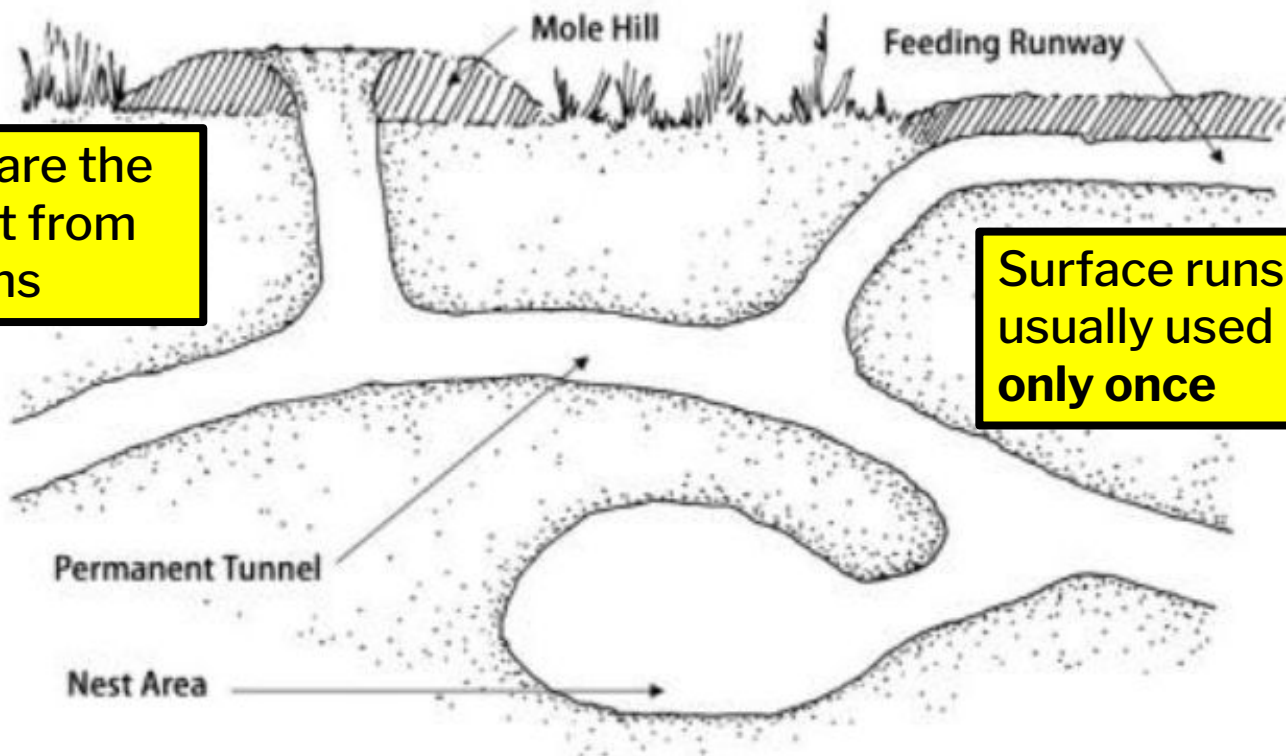
# Territories:

Male mole territories may overlap with a number of females



- ★ But not with other males
- ★ Female territories may overlap with other females

# What Mole Tunnels Look Like:



Mole hills are the excess dirt from excavations

Surface runs usually used only once

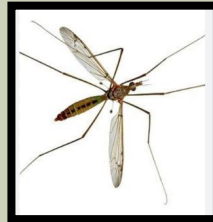
Moles can tunnel 15 feet per hour!

# So, what do moles eat?

Mostly Invertebrates:  
70-90% Earthworms, but also:



- Grubs,
- Slugs,
- Snails
- Adult and Larval Insects,
- Crane flies
- Centipedes
- Millipedes
- Ants
- Sow bugs
- Termites
- Beetles & Crickets



# What about plants?

## *Something* is eating them!

Yes, Moles do occasionally eat plants—

- Grass roots
- Some vegetable crops
- Some bulbs and seeds

***BUT! They seldom cause significant damage.***

The real culprit:



# VOLES!

Why do moles keep moving in to MY YARD??



Because YOU invited them!

Healthy lawns are perfect mole habitats:

--moist, soft, fertile soil, with man-made edging or timbers = the perfect worm and insect habitat.

**Moles love it!**

## So, What Can I DO?

*Always use the LEAST toxic method FIRST.*

### **Option A: Learn to live with them.**

- ❖ Use a rake to flatten mole hills, and reseed if needed
- ❖ Step on the raised ridges of surface tunnels; this helps plant roots not dry out



- ❖ Adopt a more naturalized landscape where mole hills are hidden by shrubs or taller grass



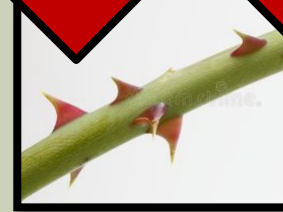


# What about putting objects in the runs?

## People have tried these:

- Ground/Broken glass
- Used razor blades
- Sections of barbed wire
- Thorny rose bush canes

**These are dangerous to YOU,**  
and *moles just block the  
tunnel and dig around them.*



# Option B: What about trying to repel them from my lawn?

## These don't work:

- Hair
- Urine
- Used cat litter
- Garlic
- Chewing gum
- Mothballs
- Ex-Lax



# Pinwheels, Vibrating stakes & Ultrasonic devices –Nope.

**Moles are used to vibrations from lawn mowers, people walking, etc.**



# What about trying to FORCE them out?

- Flooding
- “Mole Bombs”
- Gas Cartridges

**Ineffective!**



Why? Because Moles can have very extensive tunnel systems, and these can't penetrate the entire system.

# What about Mole Plants?



Mole plants are:

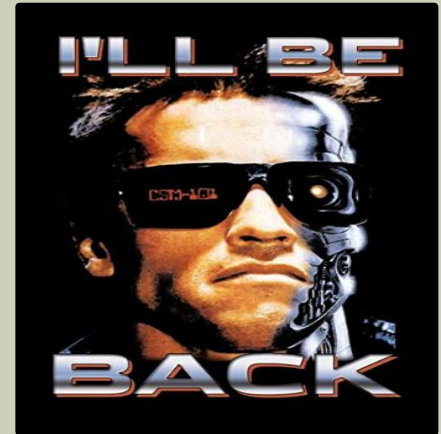
- **Ineffective.** There is no evidence moles avoid these plants.
- **INVASIVE!** Note the distinctive opposite leaves! REMOVE them when you see them!

# What about Mole Repellents?

Mole repellents may be useful for a short time, but they wear off.

You just **think** you drove them away, but they are just busy in another part of their territory.

***They will be BACK!***



# HELP! Is there **any way** to stop moles?

Barriers can help, but are **impractical** except for small areas

First, dig trench:  
**2-3 FEET deep**



Fill trench with ROCKS  
or put in a WIRE MESH

**( $\frac{1}{4}$  inch Hardware cloth will  
also keep out Voles)**

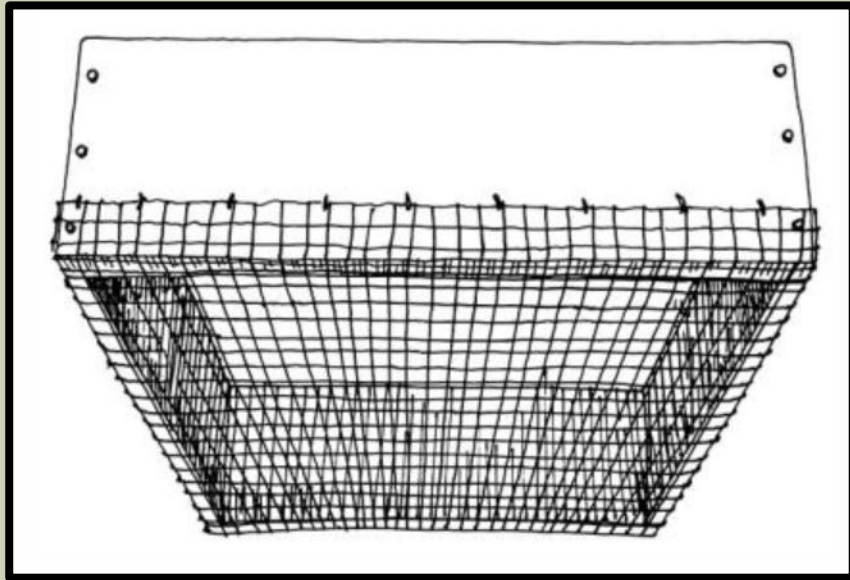
Be sure the WIRE BARRIER is  
**2 feet** into the dirt,  
and **6-12 inches** above ground

***Have a chiropractor  
on speed dial***





Raised beds can be protected by completely screening the bottom of the bed with hardware cloth before filling with soil.



What about chemicals? Can I spray something?

**No Chemicals are recommended**

Besides, chemicals are:



expensive



poison the  
groundwater



kill beneficial  
invertebrates



may even damage  
songbirds and  
other wildlife.

# What about trapping moles?





This is the **only really effective** method of getting rid of moles (until another mole moves in.)



Unfortunately, in Washington State, there is a law against **body gripping** traps.

In 2000, Washington state voters passed Initiative 713 which revised Washington state law so that

***“it is unlawful to use or authorize the use of any steel-jawed leghold trap or any other body-gripping trap to capture any animal”  
(RCW 77.15.194)***

This makes body-gripping or **body-piercing mole traps** illegal for anyone to use in Washington. **You may legally trap or kill moles** on your property using only **cage-traps** or “**common rat and mouse traps.**”



## What to do?

- You can legally trap moles using common rat or mouse traps. **OR!**
- Whack a mole!
  - You wait to see **movement**
  - You whack the soil above the tunneling mole **with a shovel.**
  - This actually kills them.
  - Supposedly.

## Another option: You can shoot them

- Wait until you see activity, and shoot down at the mole as it is digging.
- Not everyone is comfortable with this option
- This would work better in a rural setting





- Like the shovel method, you need **great deal of time and patience**



# Natural Control: Mole Enemies are Your Friends

Predators of moles include:



Snakes



Dogs



Coyotes

Barn Owls And Raptors  
prey on juvenile moles above  
ground



## What if I **want** to use traps?

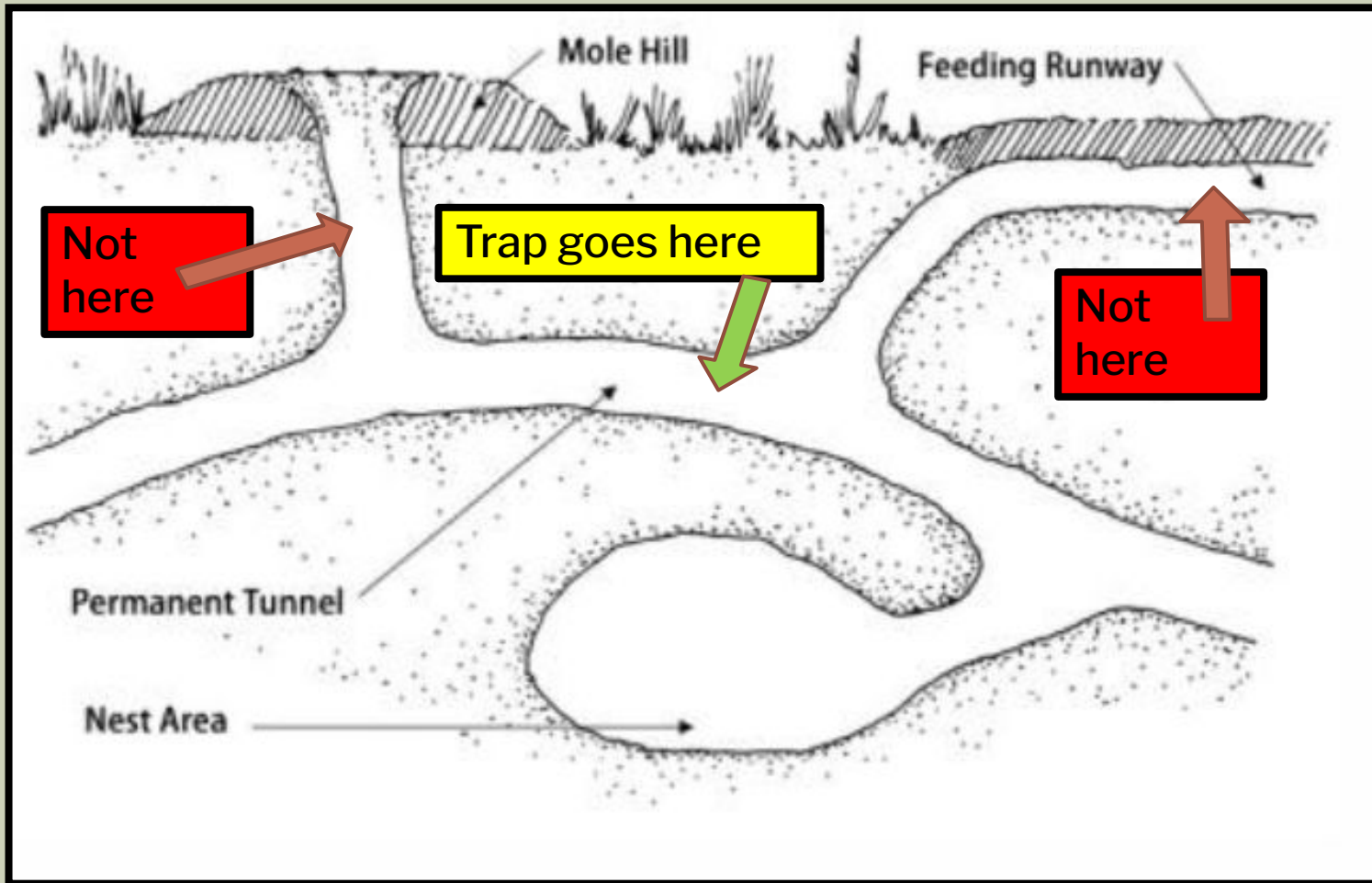
- **It is still illegal**, and as Master Gardeners we can't **tell you** to use them in Washington.
- According to the Washington Dept. of Fish and Wildlife, they are not really interested in prosecuting mole trap use, as long as it **does not endanger the public**.

Your choice:

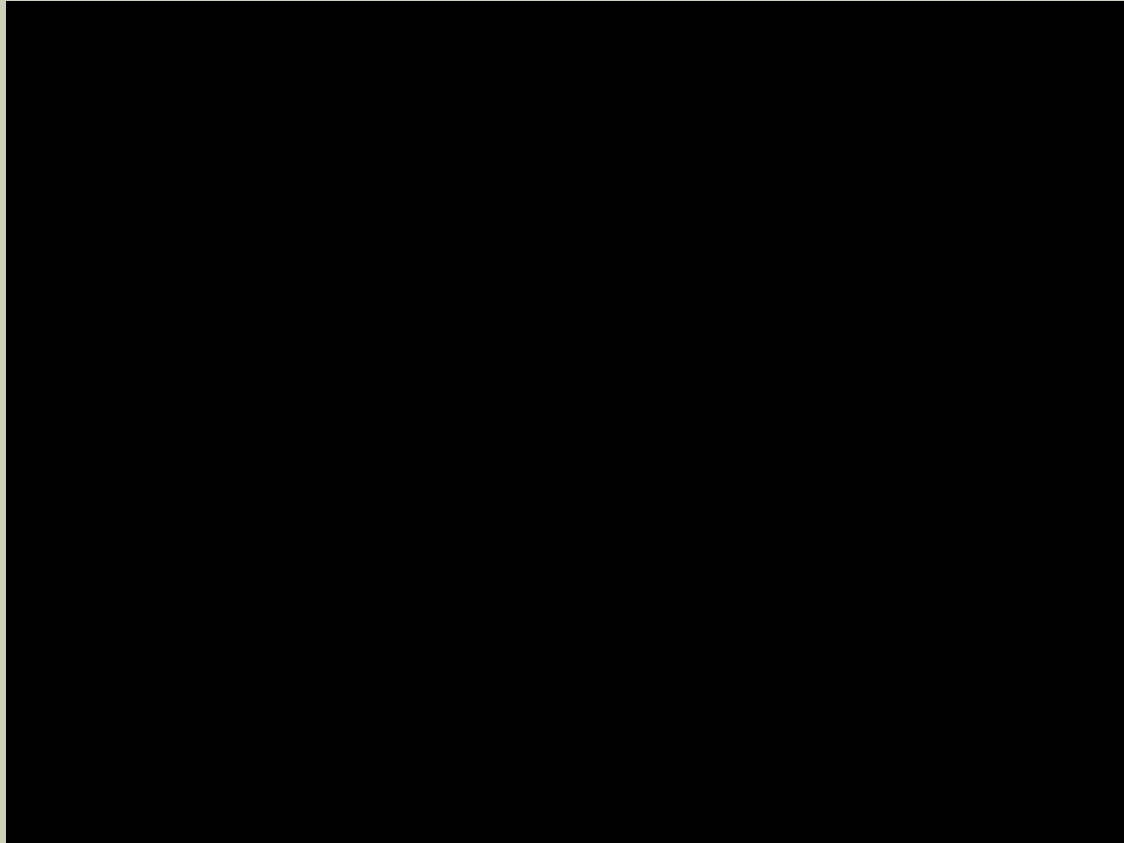
- ***Break the law? Or move to another state?***

The following is information about how to use traps to catch moles.

This information is intended for people who live in one of the 49 states that allow the use of these traps.



FINDING THE MAIN CHANNEL FOR  
SETTING THE TRAP

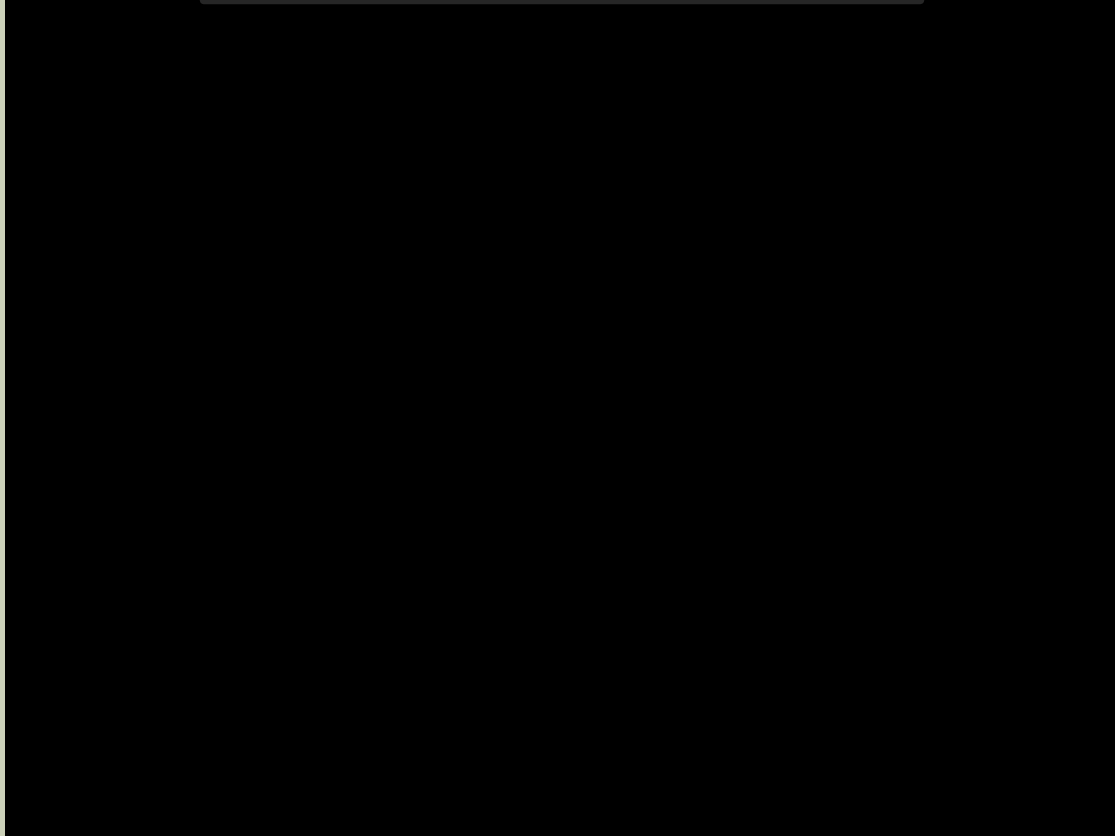


LET'S SEE IF THE TUNNEL IS THERE!

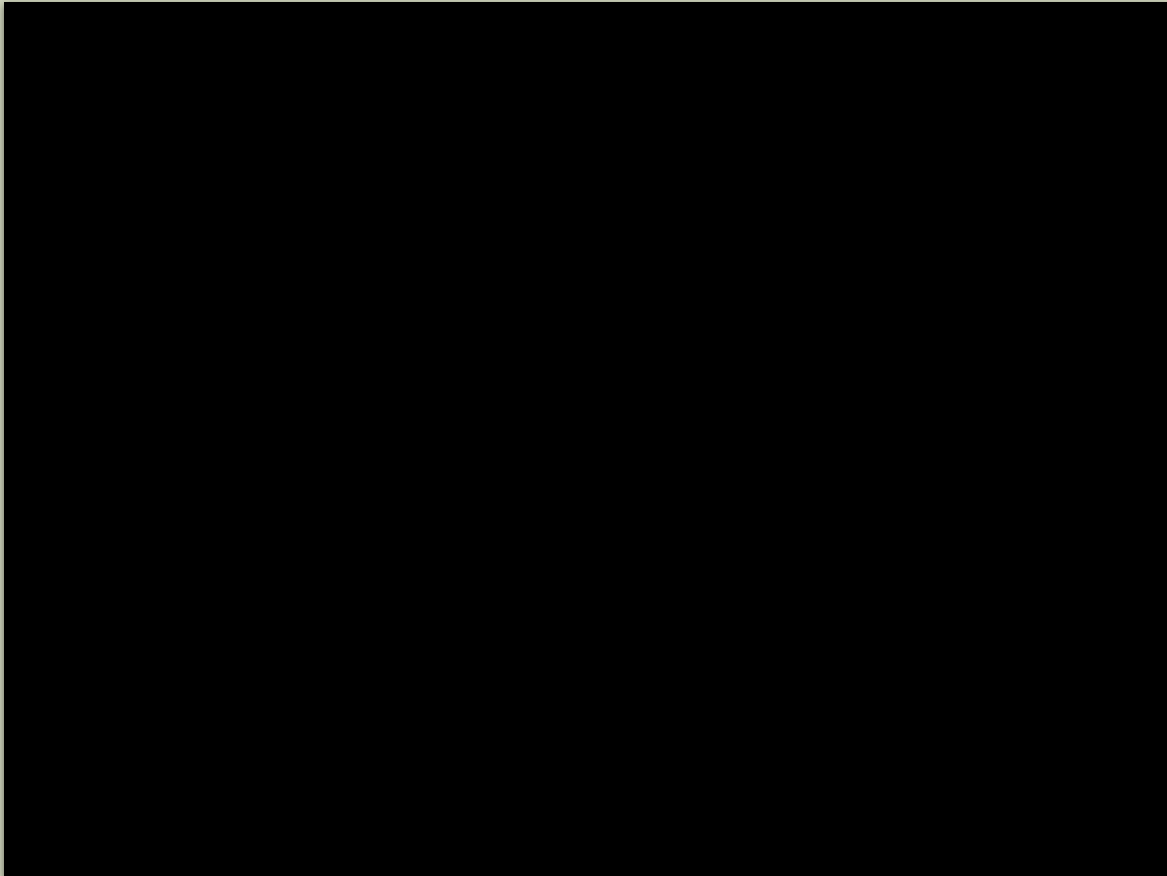




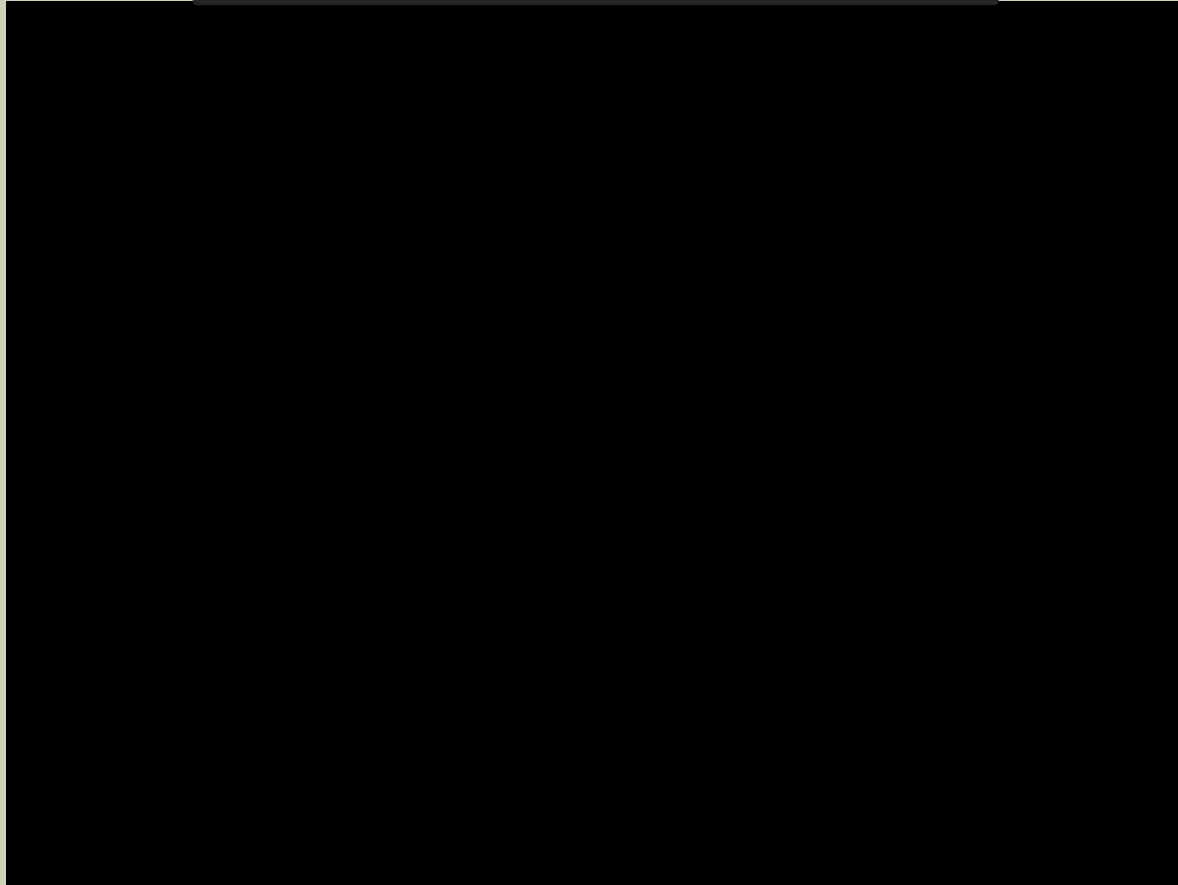
## HOW TO SET A MOLE TRAP



DID WE CATCH A MOLE?



## HOW TO REMOVE A MOLE FROM A TRAP



# THE TROPHY SHOT!



Can I eliminate moles from my property?



## The Bottom Line:

- Healthy lawns provide an ideal habitat for moles.
- Even if you are successful in eliminating your moles, **they will continue to move in from surrounding areas.**



**Brought to you by Mole Girl Enterprises**

## References:

- Washington Department of Fish and Wildlife. Living With Wildlife: Moles.  
<https://wdfw.wa.gov/species-habitats/living/species-facts/moles>. 2023.
- WSU CAHNRS and WSU Extension. “Lawn and Turf: Moles.”  
<https://hortsense.cahnrs.wsu.edu/fact-sheet/moles/> .  
28 Dec. 2022.