ANIMAL PESTS THAT BOTHER HUMANS
BITING MIDGES

PUNKIES

NO-SEE-UMS
SWEET ITCH
CULICOIDES HYPERSENSITIVITY
SUMMER ECZEMA
“BUFFALO GNAT”
Animal lice cannot live on humans, and human lice cannot live on other animals.
BED BUG

Does not transmit pathogens
Transmits the protozoan that causes Chagas Disease – in its feces. Our kissing bugs do not defecate while feeding, greatly reducing the chance of transmission.
Flea Allergy Dermatitis
People react differently to flea bites.
Brain Teaser – 2

What percentage of all new or emerging diseases that threaten human health today are zoonotic or vector-borne illnesses?

75 Percent!
Bubonic plague is a rodent disease. It is maintained in rats (the reservoir) and transmitted by bites of fleas (particularly the Oriental Rat Flea) from rat to rat and also from rats to humans – a true zoonosis.
Plague

Cervical bubo

Subcutaneous hemorrhage resulting in necrosis
Human Plague Cases in the United States over Past 50 Years
Mites on chickens
Northern Fowl Mites
Ornithonyssus sylviarum

Northern Fowl Mite
> 74 wild bird spp. host NFM
Northern fowl mites migrate away from wild bird nests within a week following fledging.

38% of sampled nests (39 of 102) positive for NFM

Most (82%) NFM-positive nests were collected in June and July.
Larval Mite  

Chigger  

Red Bug
Natural chigger hosts include reptiles such as lizards and snakes. Chiggers develop on these hosts without causing discomfort.
Trombiculiasis
Any stimulus (cold, pain, pressure, etc.) can override the chigger itch temporarily.
Chiggers not in Spanish moss; in vegetation on ground (where lizards and toads are).
Pyemotes tritici
Pyemotes ventricosus

Straw Itch Mites

In hay – affects horses
(pruritic papular dermatitis)
*Pyemotes herfsi*

Oak Leaf Gall Mite

*Cecidomyid larvae*
Ixodes scapularis
Lone Star Tick (male)
Amblyomma americanum
Lone Star Tick

Dermacentor variabilis
American Dog Tick
Seed Ticks

Larval (6-legged) ticks
Seed Ticks (larval ticks)
Lone Star Tick

The Most Common Tick in the Southeast
How to remove a tick
Tick Bites and Red Meat Allergy

galactose-\(\alpha\)-1,3-galactose (alpha-gal)

1. Develops later in life
2. Sugar (not protein)
3. Hives to anaphylaxis
4. Delayed hypersensitivity
5. Blood-type dependent (maybe)

Nausea, diarrhea
External hives
Anaphylaxis
Asian Longhorned Tick (*Haemaphysalis longicornis*)
Asian Longhorned Tick was first found on a sheep in New Jersey in Fall 2017; identified in New York, Pennsylvania, West Virginia, Virginia, Maryland, Arkansas, and North Carolina in 2018. Found on sheep, cattle, dogs, deer, opossum, and other wildlife.
Avoidance is the key

Treatment is symptomatic

Avoidance is the key